Report of Inquiry into Motor Vehicle Accident Compensation in Ontario

The Honourable Mr. Justice
Coulter A. Osborne
Supreme Court of Ontario
Commissioner

SUMMARY OF FINDINGS
AND RECOMMENDATIONS

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SUMMARY OF FINDINGS AND RECOMMENDATIONS

Although there are eleven issues specifically referred to in the Order-in-Council establishing this Inquiry, two issues, no fault automobile insurance and public automobile insurance, dominate.

The notion of no fault automobile insurance is not new. It was recommended in 1932 in what has come to be known as the Columbia Report. A form of no fault automobile insurance was proposed by Professors Keeton and O'Connell in 1965. In Ontario, no fault automobile insurance was recommended by the Ontario Law Reform Commission in 1973, in a modified form by the Select Committee on Company Law in 1978 and by the Ontario Task Force on Insurance in 1986. We have had no fault compensation for workplace injuries in Ontario since 1914. No fault benefits have been a part of the Ontario automobile insurance policy since 1972.

Threshold no fault automobile insurance is an American no fault/tort system compromise. Threshold no fault was first introduced in the United States in the 1970s. In threshold no fault, expanded no fault benefits are funded by denying the less seriously injured compensation for pain and suffering.

In considering the appropriate system of compensation for those injured in motor vehicle accidents in Ontario, I have looked to the experience of other jurisdictions such as Quebec, Australia, New Zealand, Great Britain, Switzerland, France, West Germany and a number of American states. It quickly became apparent to me that motor vehicle accident compensation should not be considered in a vacuum. Social conditions, the availability of long-and short-term disability coverage and existing social programmes must all be taken into account.

We live in a province which provides universal medical and hospital care. Billing beyond the schedule of fees prescribed by O.H.I.P. has been prohibited. No fault benefits are a compulsory part of the standard form of automobile insurance policy. Automobile insurance third party limits are $200,000. The average insured motorist has third party coverage of more than $500,000. Automobile insurance is compulsory. Less than 2% of Ontario drivers are uninsured. All Ontario drivers have uninsured/unidentified coverage. Over 90% of Ontario drivers have underinsured coverage. Non-economic compensation is capped at $100,000 (1978 dollars). Jury verdicts are subject to reasonable review by our appellate courts. Few motor vehicle accidents clog our courts at the trial level.

Steadily increasing bodily injury claims costs have led some to conclude that Ontario is now, or is soon to become, the "California of the North". This conclusion seems to me to be more rhetorical than substantive. It is consistently supported by anecdotal evidence, data confirming the steady increase in bodily injury loss costs and a specific reference to one case, McErlean v. City of Brampton. I have chosen to ignore the anecdotal evidence and I have attempted to determine if and why bodily injury loss costs have increased. The relevance of the above-mentioned McErlean case, the flagship of the "California of the North" fleet, has been dramatically reduced because of the Court of Appeal's reversal of the trial judgment on both liability and damages. The judgment of the Court of Appeal seems to me to have reduced the anxiety levels of some segments of the insurance and reinsurance industries. I note that the November 1987 issue of the Canadian

Underwriter contained this comment in a concluding reference to the Court of Appeal's judgment--"Goodbye California of the North".

Threshold no fault has been recommended by many, including the Insurance Bureau of Canada. The model most frequently looked to is Michigan's threshold no fault plan. I thought it necessary to review and assess the Michigan threshold no fault compensation scheme in some depth. I have travelled to Michigan, discussed the Michigan plan with state legislators, the Michigan Commissioner of Insurance and his staff. I have sought the views of Michigan judges and lawyers on compensation and insurance issues. In the end result, I think I understand why Michigan introduced threshold no fault automobile insurance and how the Michigan plan has operated in practice.

Social conditions and insurance circumstances prevailing in Ontario are far different from those which dominated the Michigan motor vehicle accident compensation debate in the 1970s. For reasons which will be developed in the main body of this Report, I have concluded that aside from the provision of a modest degree of additional stability for automobile insurers, cost/premium decreases would be modest were we to proceed to threshold no fault and those modest cost savings would be imported on the backs of over 90% of injured Ontario motorists who now have the right to seek non-economic compensation.

I should make it clear at the outset that were the tort system alone to be a compensation option, I would reject it out of hand. There is, however, room for peaceful co-existence between tort and no fault. Humane rehabilitation and long-term care can be provided on a no fault basis. Death benefits, reasonable income replacement benefits, homemakers' benefits and provision for child care, can also be provided on a no fault basis. This can be done at a reasonable cost and without eroding the values inherent in tort law which I view to extend beyond the perimeters of compensation and deterrence.

I do not accept the argument that either pure no fault or threshold no fault automobile insurance is justified as a first step to comprehensive accident or disability compensation. While I am of the view that comprehensive compensation ought to be given further consideration, in practical terms, we are not remotely close to implementing a system of comprehensive compensation for accident victims or for the disabled. The second step is too far removed from the first step. Thus, the first step must be looked at on its own. There are existing problems which require immediate, common sense solutions. It seems to me realistic, quite apart from the provisions of the Order-in-Council establishing this Inquiry, that I consider no fault automobile insurance on its own merits.

In the end result, I hope after considering all positions fairly, I have reached the conclusion that existing no fault benefits ought to be substantially expanded, made truly no fault in their character and that the right to individual compensation in the tort system ought to be maintained. In the system I have proposed, the need to sue has been reduced; the right to sue has been preserved. Having looked at a great number of compensation systems, in the final analysis, it seems to me that while our system is far from perfect, Ontario should be an exporter, not an importer of compensation systems.

There is, as well, the public automobile insurance issue. Quebec, Manitoba, Saskatchewan and British Columbia all deliver automobile insurance through public monopolies. Saskatchewan's plan has been in place since 1946. While it can be said that there is a lengthy history of a free market economy in Ontario, public delivery of automobile insurance in Canada has been established for a considerable time in four of ten Canadian provinces. I have looked to the experience of those provinces having public plans for guidance.

I have attempted to deal with the public automobile insurance issue by asking and then answering this central question, "Will Ontario's motorists be the beneficiaries of efficiency gains and thus lower premiums were Ontario to deliver automobile insurance through a public monopoly?"

In the absence of clear and convincing evidence of efficiency gains, it seems to me that there is no more justification for nationalizing the automobile insurance industry than there is for nationalizing any other industry.

While the private sector automobile insurance industry has in many respects been its own worst enemy, sensible rate regulation and reasonable external control of claims and underwriting practices should eliminate many problems about which consumers have legitimately complained. There is no reliable evidence that consumers will benefit were Ontario to nationalize the automobile insurance industry and deliver automobile insurance through a public monopoly.

The following is a summary of the major findings and the recommendations contained in this Report. Both the findings and recommendations are listed by subject. The findings are prefaced by the letter "F" and the recommendations by the letter "R". The number in brackets after each finding and recommendation indicates the page(s) in the Report where the finding or recommendation is located.

A. THE AUTOMOBILE INSURANCE INDUSTRY IN ONTARIO (Chapter 4)

Structure

F1. The automobile insurance market in Ontario is unconcentrated. Based on premium income the top ten insurers in Ontario have 53% of the market; the top twenty insurers have 74% of the market. (95)

F2. Approximately 98% of motor vehicle owners in Ontario are insured. (97)

F3. As of August 1987, 1.7% of private passenger vehicles in Ontario were insured through the Facility Association. Facility Association private passenger basic premiums are about 205% of the weighted average standard market premiums. As of its 1986 year-end, the Facility Association showed a deficiency of expenses over revenue of $29.6 million; Ontario's losses equal 52% of the total Canadian losses, or more than all the other provinces combined. (101-102)

F4. 28.79% of Facility Association drivers are five-year claims-free drivers; 80.79% of those insured through the regular market are five-year claims-free drivers. (105)

F5. The loss experience for Toronto fleet taxis is so bad that even with the substantial Facility Association premiums, taxi risks are almost uninsurable. In 1985 3.6% of Toronto territory taxis were insured through the Facility Association; in 1986, 50.3% of Toronto territory taxis were insured through the Facility Association. The regular market has stopped writing taxi business except for owner-operated taxis and in some circumstances co-operative taxis. (107-108)

F6. Ontario drivers insured in the regular market are subsidizing through their premiums those insured in the Facility Association. (109)

Marketing

F7. About 74% of automobile insurance sold in Ontario measured by premiums is provided through independent brokers; virtually all of the remaining 26% is marketed through direct sales agents. (109)

F8. A broker may represent any number of insurers and as few as one insurer (aside from a Facility Association servicing carrier). (111-112)

F9. Brokers are and will likely continue to be an integral part of the automobile insurance delivery system in Ontario. (113)

F10. Independent brokers are not independent once under contract to an insurer. At that point brokers are largely dependent for economic survival on the insurers they represent. (114)

F11. Insurers provide a great variety of incentives and rewards to their brokers, the cost of which increases business acquisition expense and eventually premiums. (114)

F12. The established insurers/broker structure reeks of conflict. The broker often chooses one insurer over another in consideration of a number of factors unknown to the applicant for automobile insurance. (114)

F13. The quantum of the broker's commission is almost never disclosed to the consumer; the consumer knows neither the commission rate nor the variation in commission rates among insurers the broker represents. (114)

F14. The broker has no obligation to disclose and often does not disclose any competitive premiums even among those insurers represented by the broker. As a result, in many instances, the consumer has limited information about premiums of the broker's other insurers and no access to information about companies not represented by the broker. (115)

F15. The broker's right to represent an insurer can generally be terminated on relatively short notice. Termination can have a detrimental effect on both the insured and the broker. (115)

F16. An insurer's termination of its contractual arrangements with brokers typically arises as a result of poor loss ratio, unacceptable mix of business, the failure to satisfy the insurer's accompanying business requirements, unacceptable balance of business and inadequate volume of business. (116)

F17. Insurers should be prohibited from using the number of occasions within a given period that an applicant for insurance has changed insurers as an underwriting criterion. (128-129)

R1. Brokers should not be required to belong to any specific association or organization. (110)

R2. The education programmes sponsored by the I.B.A.O. and the T.I.C. are useful and should be encouraged. (110)

R3. A control mechanism should be established, so that insurers represented by a given broker can be identified and so that brokers who represent no automobile insurer other than a Facility Association servicing carrier can also be identified. (111)

R4. At regular intervals throughout the year, the Office of the Superintendent of Insurance should *publish basic rates of automobile insurance to ensure province-wide exposure. The consumer should also be informed of typical surcharges. (119)*

R5. *Brokers and agents should be required to display prominently the names of insurers for whom they act. (120)*

R6. *Each broker should clearly identify the broker's Facility Association servicing carrier.*

R7. *All brokers should be required by legislation to provide access to the residual market (the Facility Association) through a designated servicing carrier.*

R8. *In cases other than fraud, dishonesty, etc. insurers should be required to give some minimum notice of termination to brokers. The minimum notice period should be examined through consultation between insurers and brokers. (120-121)*

R9. *Insurers terminating contracts with brokers should be required to give specific reasons for the termination. An arbitration structure through the I.B.C. and the I.B.A.O. to deal with broker/insurer disputes, including terminations, should be established. (121)*

R10. *An insurer terminating its contract with a broker because of mix, balance or volume of business, or loss ratio, should be encouraged to enter into a rehabilitation programme with the terminated* *broker. Automobile insurance companies and brokers, together with the Superintendent of Insurance and R.I.B.O., should enter into discussions to establish guidelines for the use of rehabilitation programmes particularly when loss ratio is the basis of an insurer's decision to terminate its contract with a broker. (121-122)*

R11. Upon a broker cancellation by an insurer, the cancelled broker should be obligated to inform the insured that he is no longer acting for that particular insurer and that if the consumer wishes to continue with that insurer, the consumer should contact the insurer to obtain information about other brokers writing its business. (123)

R12. The guidelines for broker termination established by the I.B.C. and the Canadian Federation of Insurance Agents and Brokers Association should be implemented. The Superintendent of Insurance should carefully monitor broker terminations to ensure these guidelines are being followed and to ensure that insureds will not be unfairly affected by having to pay increased premiums as a direct result of the insurer's termination of a broker. An insured should not be adversely affected by issues having relevance only to a broker and an insurer. (123-125)

R13. A breakdown of an insured's automobile insurance premium payment, including the broker's commission, should be provided in all cases. (125)

R14. The broker's Facility Association commission is no different than any other commission and should be disclosed to the consumer. (127)

R15. Brokers should be encouraged to give premium quotations by telephone. These quotations should be non-binding. (127)

R16. The Registered Insurance Brokers Act should be amended to prohibit any broker from acting only for a Facility Association servicing carrier. (128)

R17. Banks and trust companies should be entitled to market automobile insurance. (128)

R18. The prohibition on part-time brokerage activity should be re-examined. (128-129)

R19. Insureds having a claim against a negligent broker should not be denied compensation from the broker's liability insurer because of policy violations by the broker. (129)

B. COVERAGE AND DELIVERY PROBLEMS (Chapter 5)

Coverage and Delivery

F18. There are relatively few consumer complaints related to the resolution of bodily injury and property damage claims. (140)

F19. Insureds have no real access to any dispute mechanism through which to challenge the allocation of fault as determined by the fault chart. (141)

F20. Third party liability limits should not be open-ended because of solvency considerations; even the benefits attendant upon increased policy limits do not out-weigh the costs. (142)

F21. Delay is a problem in the payment of third party bodily injury claims. The root cause of delay aside from congested court lists in some areas is the lump sum payment compensation system which requires bodily injuries and disabilities to be stabilized before settlement or trial can realistically be considered. The bodily injury delay problem does not have anything to do with the automobile policy or with automobile insurers. (143)

F22. Delay is not a problem in the resolution of property damage claims. (143)

F23. The concept of the O.H.I.P. Bulk Subrogation Agreement is sound. The O.H.I.P. agreement has resulted in significant cost savings. (146)

F24. O.H.I.P. is sustaining losses by reason of the fact that some insureds have established special arrangements through fronting policies with their automobile insurer. (147-148)

F25. Because of the looseness of the definition of rehabilitation and its interpretation by insurers many injured persons in need of rehabilitation and contractually entitled to it are not receiving it. (161)

F26. The contractual obligation on the part of insurers to pay first party rehabilitation benefits only upon the rehabilitation expense having been incurred is destabilizing and results in delayed or no rehabilitation in many cases. The system has not properly responded to the rehabilitation needs of those injured in motor vehicle accidents who reasonably require out-of-hospital rehabilitation. (162)

F27. The insurer through its medical advisor should not have _prima facie_ veto rights over proposed rehabilitation; the insured's medical advisor's opinion as to rehabilitation and the opinion of rehabilitation counsellors should be of primary evidentiary significance. (162-163)

F28. Very few insurers recognize the cost effectiveness of rehabilitation. The four-year rehabilitation time limit has encouraged some insurers to ignore rehabilitation in the hope that its direct costs will disappear. (163)

F29. Better coordination of medical and rehabilitation no fault resources is needed. More, not less, of the disability dollar should go to rehabilitation in those relatively few but serious cases in which rehabilitation would be of assistance to the injured person. (165)

F30. The present system lacks an effective dispute resolution mechanism. The net result is that in many cases rehabilitation is not undertaken or is undertaken so long after the accident as to limit its effectiveness. (165)

F31. The $140 per week maximum disability benefit which was established in 1978 is inadequate. (166)

F32. The insurance industry's performance in the delivery of disability benefits is in general abysmal. (166)

F33. There are gaps in the definition of those who are entitled to disability benefits. (167)

F34. The 30-day return-to-work relieving provision contained in Section B of the automobile insurance policy is too short. It provides a disincentive to returning to work. (169-170)

F35. There is no effective internal or external disciplinary mechanism which would provide insurers with an incentive to extend disability payments to insureds entitled to them without undue delay. (170)

F36. The funeral benefit is too low. (172)

F37. No fault coverage should not be limited by incorporating within it exclusions related to driving conduct; suicide and attempted suicide, however, are justifiable exclusions as they reflect intentional conduct. (173)

F38. Repair costs in Ontario compare favourably with those in other provinces. (175)

F39. Where after-market parts are available, competition between car maker parts and after-market parts has reduced prices by 25-40% depending on the type of repair involved. (177-178)

F40. Uninsured/unidentified motorist coverage does not belong in Section B of the policy. (181)

R20. The $200,000 minimum third party liability limits should continue. Those wishing to receive additional protection can do so by purchasing either additional third party liability or SEF 44 underinsured coverage or both on an optional basis. (143)

R21. The structure of the O.H.I.P. Bulk Subrogation Agreement should be examined to ensure that O.H.I.P. is paid whatever health care costs to which it is entitled as a result of motor vehicle related accidents. (150)

R22. The Insurance Act should be amended to require that all licensed automobile insurers be part of the 1978 O.H.I.P. Bulk Subrogation Agreement. (151)

R23. Consideration should be given to expanding the concept of the 1978 O.H.I.P. Bulk Subrogation Agreement to include other claims, (for example, medical malpractice), where O.H.I.P. subrogation is on a case-by-case basis. (151)

R24. *Where future care costs are established at trial or by settlement, O.H.I.P.'s interest, if any, in the future care costs should be identified by the trial judge or by the settlement documentation. The present value of O.H.I.P.'s future care cost interest should be paid to O.H.I.P. (151-152)*

R25. *A study should be undertaken to determine if the first party underinsured and unidentified/uninsured coverages should be brought within the O.H.I.P. Agreement so that there will no longer be claim-by-claim subrogation in cases where those coverages are applicable. (152)*

R26. *Any insured and insurer entering into an agreement whereby the issued policy is a fronting policy or where any endorsement or other agreement results in the insured being a self-insurer, should be required to report the existence of such an arrangement and its terms to the Superintendent of Insurance. The insurer and the insured should jointly be required to pay the amount O.H.I.P. would otherwise have received had the special arrangement not been entered into. In the event that O.H.I.P., the insurer and insured cannot agree, the Superintendent of Insurance should have the authority, after consulting those involved, to deem a premium, if practical, in order to establish the base for the application of the O.H.I.P. bulk subrogation percentage factor. Alternatively, O.H.I.P. should have the right of subrogation on a case-by-case basis in those circumstances where the insured is a self-insurer. (153)*

R27. Tighter controls should be imposed to ensure that cases which should be processed through the Workers' Compensation system are not processed through O.H.I.P. (153-154)

R28. Any other government ministries expending funds for those injured by accident should be required to determine and record the cause of the accident. (154)

R29. Chiropractors should be permitted to provide the certification of disability for disability benefit payment purposes. (169)

R30. The definition of spouse for the purpose of the no fault death benefit should be the same as the definition of spouse in the Family Law Act, 1986 (F.L.A.). (172)

R31. The expansion of appraisal centres should be encouraged. (176)

R32. All insurance companies should be required to establish quality and service guidelines for the use of aftermarket parts. Parts should be of O.E.M. quality and the quality should be guaranteed by both the supplier and the insurer. Consumers should be informed of the name of the manufacturer of the auto part being used in the repair. There should be severe penalties for the importation or sale of substandard, counterfeit or look-a-like auto parts. (179)

The Automobile Insurance Policy

F41. Taken as a whole, the standard form of automobile insurance policy is badly structured and incomprehensible. (134-135)

R33. A committee should be established to re-draft the standard automobile insurance policy. Drafting should not be left solely to lawyers or committees of the insurance industry. (184-185)

R34. The general definitions and provisions should be those which apply to the entire policy without exception. Definitions and provisions which apply to particular parts of the policy should be in the relevant part of the policy. (185)

R35. Exclusions relevant to each part of the policy should be contained in that part so that there is a clear understanding as to what coverage is excluded. (186)

R36. The policy should be structured as follows: (186)
Part 1: Third Party Liability

Part 2: No fault Benefits:
- *(i) medical and rehabilitation benefits*
- *(ii) disability benefits*
- *(iii) death and funeral benefits*
- *(iv) other benefits*

Part 3: Vehicle Damage:

(i) collision
(ii) comprehensive
(iii) specified perils
(iv) all perils

Part 4: Uninsured/Unidentified Motorist Coverage

Part 5: Supplementary Benefits respecting Accidents Occurring in Quebec

Part 6: Statutory Conditions, Policy Provisions and Definitions

(i) Statutory Conditions
(ii) General Provisions and Definitions

Part 7: Endorsement Coverage including SEF 44.

C. INSURANCE PRINCIPLES, THE CLASSIFICATION SYSTEM AND UNDERWRITING (Chapter 6)

F42. Premiums paid by an insured should reasonably reflect the degree of risk the insured imposes on the system. The grouping of risks with similar risk characteristics for the purpose of setting prices is a fundamental precept of any workable private voluntary insurance system. The classification of risks is fundamental to insurance. (189-190)

F43. The "good until proven otherwise" approach to premium rating is fundamentally flawed. Rating judgments have to be made before, not after, the event. (194)

F44. Cross-subsidization of a particular group or cell by others within the system runs counter to the competitive dynamics of the private sector delivery of insurance. (196)

F45. A classification system must be measured against a number of efficiency and equity criteria. Significant criteria include homogeneity, separation, reliability, acceptability and incentive value. (197-199)

F46. Young (under 25) drivers are involved in proportionately more accidents and more severe accidents than other drivers. (202)

F47. Young (under 25) males are involved in more frequent and more severe accidents than young females. (207-209)

F48. Substituting years licensed for age as a rating variable is imperfect in that:

(i) given the probable age of members of any classification cell as defined by years licensed, substituting years licensed for age will not in substance eliminate age as a rating criterion;

(ii) years licensed does not take into account data which consistently demonstrate that young newly-licensed drivers present a greater risk than older newly-licensed drivers.

(iii) Age (and sex) will not be ignored at the underwriting level. (212-213)

F49. Unlike age, sex in its own right is not predictive; however, eliminating sex as a rating factor and substituting kilometres driven will expose the system to increased verification costs which will be passed on to the consumer in the form of increased premiums; there is also a question as to the reliability of the substitute. (213)

F50. It is likely that increased premiums for young females will result from abandoning sex as a rating variable. (214)

F51. The predictive force of marital status as a rating factor is suspect and it has in any event become a socially unacceptable rating factor. (203)

F52. The introduction of a bonus/malus system on its own is neither workable nor consistent with the fundamental principles of insurance. Charging demonstrably unequal risks, equal premiums at entry violates basic insurance principles and leads to cross-subsidization. An insured's accident record and conviction record have a place in premium setting, but they cannot be used alone; they must be part of a sound classification system consistent with fundamental principles of insurance. (220)

F53. In order to operate with any degree of efficiency, a bonus/malus classification system requires complete exchange of information among insurers. (223)

F54. Injustices can occur in a bonus/malus system because malus points are triggered by claims against the policy quite apart from the identity of the driver of the insured automobile at the time of an accident. (223-224)

F55. Underwriting abuses which existed through 1986 and into 1987, in some respects, continue to exist in the Ontario automobile insurance industry. (237)

F56. Motorcycles present a problem from a standpoint of first party no fault coverage. Those injured on motorcycles being relatively unprotected tend to suffer more severe injuries than those injured in automobile accidents; further the owner/driver population of motorcyclists tends to be young. (237-238)

F57. Taxis present a unique premium problem; the root cause of the taxi industry's premium problems is high loss costs. Even at the high current premium levels Ontario motorists are subsidizing taxis and taxi operators outside of Toronto are subsidizing taxi operators located in Toronto. (239-240)

R37. Marital status should no longer be used by the automobile insurance industry as a rating factor. (203)

R38. The proposed classification which eliminates age, sex and marital status as rating factors should be discussed and evaluated outside the parameters of the committee established to create it. The impact of the system on the premiums consumers will be required to pay should be disclosed and discussed. (217)

R39. *The resort to the number of insurers any applicant for insurance has had over any particular timeframe as an underwriting criterion should be prohibited and deemed an unfair underwriting practice. (230)*

R40. *Named occasional drivers should be excluded from automobile insurance coverage in circumstances where both the named insured and the occasional driver have acknowledged in writing that coverage is not sought and is not to be extended to the named occasional driver. (231)*

R41. *A new offence should be created so as to penalize the named insured in those cases where the named insured has given consent to the excluded occasional driver's use of the insured vehicle. (232)*

R42. *A new offence, short of theft and in addition to driving without insurance, should be established to penalize an excluded occasional driver who has driven the insured's car with or without consent. (232)*

R43. *The loss experience of the Facility Association should be continually monitored; steps should be taken to attempt to identify those clean risk drivers who demonstrably do not belong in the Facility Association from those risks, clean or otherwise, that the regular market cannot reasonably be expected to underwrite. (234-235) See also R141.*

R44. *The basic premium rating for three-wheel all terrain vehicles, four-wheel all terrain vehicles and other off-road vehicles such as snowmobiles should be examined as part of structuring the new classification system. (239)*

R45. *The recommendations contained in the 1987 Report of the Metropolitan Licensing Commission concerning the taxi industry should generally be endorsed. (241)*

R46. *There should be better driver education and control, possibly through the use of incentives, for taxi drivers. (241)*

D. LOSS COSTS AND PREMIUMS (Chapter 7)

Loss Costs

F58. Property damage loss costs per vehicle have remained relatively stable. (248)

F59. There has been a steady increase in bodily injury loss costs since 1982. (248)

F60. The property damage component of third party liability coverage has remained relatively stable. Accident benefit loss costs have increased but are under control. The loss cost problem area is in bodily injury claims. (250)

F61. Non-pecuniary general damages represent the single most significant component of damages regardless of the size of the claim. As the size of the claim increases, the proportion of non-pecuniary general damages decreases. In smaller claims, non-pecuniary general damages account for approximately 70% of the claims settlement dollar. For claims above $75,000, non-pecuniary general damages account for approximately 25% of the claims settlement dollar. (262)

F62. Party-and-party costs paid to counsel for injured claimants account for 11% of the claims dollar. Prejudgment interest accounts for 10% of the claims dollar and F.L.A. claims account for approximately 5% of the claims dollar. (262-263)

F63. There are a number of explanations for the increase in bodily injury claims costs. These include:

(i) economic loss increases in times of economic prosperity; (269)
(ii) economic prosperity leads to more driving. As traffic density increases, accident frequency increases; (269)
(iii) since 1980, the discount rate has been established by statute at 2.5%; in 1978 a 7% discount rate was commonly used; (270)
(iv) the 1978 decisions of the Supreme Court of Canada in the Trilogy have forced trial judges and juries to break down damage assessments into reasonable constituent parts. This breakdown has resulted in a higher calculation of economic loss; (270)
(v) injured claimants have increasingly retained counsel to represent their interests. The involvement of counsel on balance will result

in an increase in the settlement value of a claim; (270)

(vi) lawyers are increasingly inventive in their development of evidence to establish economic loss which in turn has increased economic loss damage assessments; (271)

(vii) experts are more capable of giving evidence in a manner that is convincing to trial courts and on balance this has resulted in an increase in damages; (271)

(viii) in cases where future care costs are significant or in major fatal accident cases gross-up significantly increases claims costs; (272)

(ix) health care advances have resulted in badly injured persons surviving at great expense over a significant, albeit reduced, life expectancy; (272)

(x) the pre-trial process has generally worked to increase the value of claims; (272)

(xi) Family Law Reform Act (F.L.R.A.) and F.L.A. claims have increased damages; however, recent increases in bodily injury claims costs cannot be attributed to F.L.A. claims; (273)

(xii) prejudgment interest has had a significant impact on the costs of bodily injury claims; (273)

(xiii) while judicial generosity is overplayed by insurers, there is no doubt that economic loss has increased and the judicial treatment of it has been more generous, particularly in the case of future care costs. This has increased bodily injury costs. However, in the last few years, trial judges and juries have become more moderate in their treatment of non-pecuniary compensation, particularly in respect of F.L.A. claims. (274)

Premiums

F64. Although third party liability/property damage premiums increased substantially in 1985 and 1986, the 1986 level was still less than the premium level in 1977. (277)

F65. The accident benefit premium line has been relatively unstable but the variations from year to year have not been large. In constant dollars, accident benefit premiums in 1986 were marginally lower than accident benefit premiums in 1976 and about the same as accident benefit premiums in 1981. (277)

F66. Section C collision premiums in 1986 were substantially lower than their high point in 1977 and about the same as they were in 1983. (277)

F67. Section C comprehensive premiums have increased substantially since 1975. (277)

F68. The composite all coverages premium trend follows the same general path as third party liability premiums. Even after the substantial 1985/1986 increase, the premiums were still less than premiums in 1977, when measured in constant 1981 dollars. (278)

Loss Costs and Premiums

F69. The bodily injury/property damage cost premium gap was at its widest in 1977 when premiums significantly exceeded costs and in 1985 when loss costs significantly exceeded premiums. (279)

F70. Reserves should be discounted in order to provide a realistic assessment of an insurer's performance. (283)

F71. The insurance industry took no real account at any time and particularly in the early 1980s of the probable impact of prejudgment interest and F.L.R.A. claims. Insurers also did not take reasonable account of the probability that claims costs would necessarily increase once the recession of the early 1980s ended and relative prosperity returned. (285)

F72. Given bodily injury loss cost trends, premiums which should have been increased earlier and more gradually, were increased in 1985/86. By 1985/86 the premium increase was probably justified, but given its sudden implementation consumer complaints were to be expected. (283-285)

F73. The property damage part of the third party liability coverage presents no real cost problem and should not be the source of a premium concern. (295)

F74. Accident benefit coverage is an area where there has been an increase in average claims costs;

however, there is not a cost/premium problem for this coverage. (295)

F75. There is no cost/premium problem with the optional collision and comprehensive coverage lines.

F76. Bodily injury frequency has stabilized. (296)

F77. As long as bodily injury average loss costs per car continue to increase, premiums will increase. (296)

F78. The 1985/86 bodily injury/property damage premium increases brought premiums and loss costs into a semblance of balance. There are current indications of moderation within the system at the third party level. (296-297)

E. COURT PROCEEDINGS (Chapter 9)

Pleadings

F79. In motor vehicle accident litigation, pleadings are unnecessarily complex; pleadings particularizing negligence are of no real benefit. (344)

R47. The Rules of Civil Procedure should be amended to eliminate the requirement that pleadings in motor vehicle accident litigation particularize allegations of negligence. (344)

R48. The Rules of Civil Procedure should provide that the Statement of Claim set out the damages claimed for both economic and non-economic loss for each plaintiff and a statement as to the nature of the *plaintiff's injuries. The Statement of Defence should briefly set out the defendant's position on both liability and damages. (344-345)*

R49. Trial judges should be given specific authority to impose cost penalties on solicitors making unsupported allegations in pleadings. (345)

Pre-trials

R50. All actions should be pre-tried and should not be placed on a trial list until certified as ready by the pre-trial judge or, in the absence of the pre-trial judge, by another judge of the court. (346)

R51. In a motor vehicle accident case when damages are in issue, pre-trial documentation should include:

- *(a) all medical reports of any doctor whose evidence will be tendered at trial either in the form of viva voce evidence or by the filing of a medical report;*
- *(b) any other experts' reports to be relied upon; and*
- *(c) a breakdown of each party's position with respect to all aspects of economic loss. (346)*

R52. Where possible, the parties themselves should attend the pre-trial, unless the defendant is insured and policy limits are not a relevant issue. (346)

R53. *Actions should not be set down for pre-trial until counsel setting the action down has specifically certified that discoveries have been completed and the action is ready for trial. The onus should be on counsel to arrange a pre-trial. (366)*

R54. *All Provincial Courts (Civil Division) should assign duty counsel to assist all those who require help at the pre-trial. Duty counsel at the pre-trial should ensure that plaintiffs, in particular, have filed Offers to Settle and that required evidence (such as medical reports) is available. Medical evidence in the Provincial Court (Civil Division) should be in the form of a report unless leave is granted to have a medical practitioner give viva voce evidence. (356-357)*

R55. *The Ministry of the Attorney General's data collection procedures should be expanded, in order to capture data relating to the number and the time consumed by pre-trials as related to the same classification of cases (including motor vehicle cases) on which data are now recorded. (366-367)*

Medical and Other Experts' Reports

F80. The dominant objectives relating to the production and disclosure of medical and other experts' reports should be to promote fair trials, early settlement and reduce the cost of litigation. (351)

R56. *Section 52 of the Ontario Evidence Act should be amended to bring within its provisions the reports of all health professionals including dentists,* *chiropractors, psychologists, physiotherapists and rehabilitators. (351)*

R57. *Section 52 of the Evidence Act should be amended to require that any party intending to call a doctor or other health professional as a witness be required to produce all reports of that witness. (353)*

R58. *Section 52(2) of the Evidence Act should be amended to require explicitly that a party intending to file a medical report produce it to the other side. (353)*

R59. *Section 52(3) of the Evidence Act should be amended to provide that doctors who have medically examined any party and doctors who are involved as consultants only, are both subject to the same rules with respect to medical reports and a doctor's right to give viva voce evidence at trial. (353)*

R60. *Greater use should be made of Rule 53.02(1). (352)*

R61. *Rule 50.05 of the Rules of Civil Procedure should be amended to require that medical reports and reports of other experts be produced both for the pre-trial judge and other parties seven days before the pre-trial. (352)*

R62. *The trial judge should have the discretion to permit an expert's report to be filed as an exhibit in jury and non-jury trials even if the expert will be called to give viva voce testimony at trial.*

Offers to Settle

R63. *The Rules of Civil Procedure should be amended to require a plaintiff to make an offer to settle within 7 to 10 days after a pre-trial. (360)*

R64. *Rule 57.01(1) of the Rules of Civil Procedure should be amended to add as a factor the court may consider on the question of costs, the failure of a successful party to make an offer to settle. (360)*

Trials

F81. The impact of the recommendation of the Ontario Courts Inquiry as to costs in the Provincial Court (Civil Division) is that a 3% savings may be effected. (356)

F82. Motor vehicle accident cases do not consume an inordinate amount of court time because the vast majority are concluded by settlement, not trial. (383)

F83. In particular, over the period 1982-1985:

(a) The vast majority of all motor vehicle accident claims were resolved without any action being commenced.

(b) Actions were commenced in less than 50% of bodily injury claims.

(c) Even when an action was commenced, more than two-thirds of the actions were resolved before the action was set down for trial.

(d) Between 2% and 3% of bodily injury claims went to trial. (364-365)

F84. The number of motor vehicle actions commenced in the Supreme Court of Ontario declined during the period 1982-1985; the number of Supreme Court motor vehicle actions set down for both jury and non-jury trial remained more or less stable in that period. (367)

F85. There has been a significant increase in the number of motor vehicle jury actions in both Supreme and District Courts. The increase in the delivery of a jury notice is most significant in Toronto in both courts but particularly so in Supreme Court motor vehicle cases. (375)

F86. Most jury notices are served by defendants. (375)

F87. There has been a significant reduction in the percentage of Supreme Court motor vehicle non-jury actions tried, a reduction which is likely attributable to the increasing impact of the pre-trial in promoting settlement. (375)

F88. In the District Court a greater percentage of non-jury motor vehicle accident actions went to trial than jury actions. (376)

F89. There has been a significant increase in the percentage of motor vehicle accident cases settled before trial in the Supreme Court in the period 1985-1986 compared to the period 1979-1980. (376)

F90. There was a significant increase in the number of non-jury motor vehicle accident cases settled before trial in the District Court in the period 1985-86 compared to the period 1979-80. (376)

R65. The Rules of Civil Procedure should be amended so as to create two separate lists as follows:

(i) a list of cases set down for pre-trial; and
(ii) a list of cases ready to be tried. (366)

R66. The list of cases ready for pre-trial should consist of cases in which counsel has certified that discoveries have been held and the case is ready to be pre-tried. (366)

R67. The cases-ready-to-be-tried list should consist of pre-tried cases which have been certified as ready for trial by the pre-trial judge. (366)

R68. The Courts of Justice Act should be amended to provide that in jury cases, trial judges have a discretion to express an opinion to the jury as to a range of compensation for both pecuniary and non-pecuniary damages. (354)

R69. Trial judges should give greater consideration to making orders in the form of directions to the Assessment Officer with respect to disbursements for experts in connection with motor vehicle accident litigation. (359)

R70. The Ministry of the Attorney General should examine the cost of civil jury actions and should consider *increasing the fee paid for setting an action down for jury trial. (376-377)*

F. COMPENSATION ISSUES (Chapter 10)

Family Law Claims

F91. The statistical evidence does not suggest excessive costs associated with family law claims, nor does it suggest that the assertion of trivial claims by numerous relatives for damages for guidance, care and companionship is widespread. (390)

F92. Recent statutory procedural changes and decisions of the Ontario Court of Appeal will reduce both the number of family law claimants and amount of awards for loss of guidance, care and companionship. As a result, changes to the F.L.A. cannot be justified on a cost basis. (390-392)

F93. The principles underlying the awarding or compensation for guidance, care and companionship as set forth in the F.L.A. are on balance to be preferred to those underlying the recent recommendation of the Ontario Law Reform Commission. (394-395)

R71. Section 61(2)(e) of the F.L.A., which provides compensation for the loss of guidance, care and companionship, should not be amended. Specifically, the recommendation of the Ontario Law Reform Commission that claims by dependants for loss of guidance, care and companionship be abolished, should not be implemented. (393-394)

Prejudgment Interest

F94. Compensation of the victim should be the main object of prejudgment interest. The interest rate should be neutral. (400)

F95. When the full prejudgment interest rate is awarded on the non-pecuniary damage portion of an award, the plaintiff is overcompensated. (407)

R72. The Courts of Justice Act should be amended to provide that in the case of both liquidated and unliquidated damages, prejudgment interest on personal injury awards should be calculated from the date the cause of action arose. (401)

R73. Prejudgment interest payable in circumstances where SEF 44 underinsured coverage is responding to the claim, should run from the date of loss rather than from the date of notification. (401)

R74. Section 138 of the Courts of Justice Act should be amended to permit compound interest calculated at quarterly intervals to be awarded. (402)

R75. Section 137(1)(d) of the Courts of Justice Act should be amended to provide that the prejudgment interest rate be the bank rate. Section 137(1)(d) should also provide that the prejudgment interest rate be adjusted quarterly and that a fractional rate be rounded either up or down to the nearest tenth of a point. (402-403)

R76. *Section 138 of the Courts of Justice Act should be amended to provide that prejudgment interest on non-pecuniary general damages bear interest at the real rate of return. If a specified rate is used, it should be in the range of 3.5 to 4% with provision for a periodic review by the Rules Committee. (410)*

Discount Rate

R77. *A mechanism should be established to review from time to time, the appropriateness of the discount rate provided for in Rule 53.09 of the Rules of Civil Procedure. (413)*

Gross-Up and Structured Judgments

F96. A structured settlement has certain identifiable advantages over a pure lump sum, future loss payment which is to be invested at a predetermined interest rate. The advantages are most obvious for future care costs in injury cases and pecuniary loss in fatal accident cases. (422-424)

R78. *Section 129 of the Courts of Justice Act should be amended to provide for mandatory structured judgments at the discretion of the trial judge, for future care costs in injury cases and for pecuniary loss in fatal accident cases. (424)*

R79. *Once the trial judge in the exercise of his discretion imposes a structured judgment, the parties should be given a reasonable but short period of time (for example 14 days) to consult structured settlement consultants or life insurers* *and then make submissions to the trial judge as to the form of the structured judgment. (425)*

R80. *To the extent a gross-up calculation is still required in jury trials, that calculation should be made by the trial judge (rather than the jury), after the jury has made findings of fact as to compensation which would attract gross-up. (425)*

R81. *If a gross-up calculation is still required, a sub-committee of the Rules Committee should be established to develop a uniform method for the gross-up calculation to be used in all relevant cases. (425-426)*

Collateral Source Rule

F97. Inquiry claims survey data demonstrate that those injured in motor vehicle accidents who have collateral sources of income are receiving 56% more than their tort law-based wage loss entitlement. This results in aggregate overcompensation among all injured in motor vehicle accidents of 17%. (433)

F98. It is reasonable to conclude that abolition of the collateral source rule would have an uncertain but demonstrable effect in reducing claims frequency.

F99. The collateral source rule as presently applied in Ontario is wasteful in practice and cannot be justified in principle. (438)

F100. The continuation of the collateral source rule cannot be justified on deterrence grounds.

F101. Many sources of collateral payments do not exercise subrogation rights. (439)

F102. For cost and public relations-related reasons it is unlikely that subrogation rights will be exercised and it is therefore inappropriate to develop a model for eliminating overcompensation caused by the collateral source rule that is premised on subrogation. (439)

R82. The Government of Ontario should enact legislation which provides:

- *(a) that the collateral source rule be abolished;*
- *(b) that where an injured person receives collateral benefits in the nature of indemnity payments from either public or private sources, the amount of such payments (subject to income tax where appropriate) be deducted from the relevant components of a tort award made to the injured person so that there will be no overcompensation. (442-443)*

R83. Taxable collateral source payments should be deducted net of tax. A flat 20% tax factor should be applied to reduce the collateral source offset. (443-444)

R84. Loss of future income should be established and paid without collateral source offset but the claimant should be required to hold future collateral source payments in trust for the third party insurer net of tax where applicable. (444)

R85. Both the Government of Ontario and the Government of Canada should conduct a review of their *respective programs which provide income assistance in the event of an accident in order to determine:*

(a) the amount of monies paid to persons injured as a result of motor vehicle accidents; and

(b) the extent to which rights of subrogation in respect of these payments are being exercised or are feasible. (443)

G. RECOMMENDED SYSTEM OF COMPENSATION (Chapter 12)

F103. Because automobile insurance is compulsory, it must be made available at a price consistent with sound insurance principles. (513)

F104. Alternative compensation systems should be assessed against the following reasonable evaluation criteria: compensation, rehabilitation, cost efficiency, incentive/deterrence, fairness, insurance considerations, constitutionality. (515-517)

F105. A comprehensive compensation plan for those injured by accident or for the disabled is not a viable option, but the design of a compensation scheme for motor vehicle accidents should take into account the prospect of the eventual development of a comprehensive compensation plan. (517)

F106. From the standpoint of the compensation criterion, pure no fault and threshold no fault are superior to the tort system. (519)

F107. Rehabilitation is an essential objective of any compensation system and it cannot be realistically achieved through the tort system. Because no fault compensation is delivered on a first party basis and because rehabilitation benefits must be made available without undue delay, the rehabilitation criterion is better served by no fault than by tort law. (520-521)

F108. Transaction costs can be reduced in a pure no fault plan. The reduction will likely be in the area of 5% of earned premiums. To that extent, pure no fault is more efficient than the current third party compensation system. It is doubtful there would be any significant reduction in transaction costs in threshold no fault. There is, hence, no cost efficiency basis on which to proceed to threshold no fault. (528)

F109. In a no fault system, if premiums are not to be increased, the funding for increased first party benefits can only be obtained by systematically reducing or eliminating existing rights to non-pecuniary compensation. (530)

F110. The tort system still performs some modest deterrent function in the motor vehicle context, even if its impact is not empirically demonstrable. (540)

F111. Even if the concepts of fault and responsibility exert no positive deterrence influence the introduction of a no fault compensation plan may well have a modest adverse effect on driver care. (542)

F112. The introduction of no fault in Quebec did have some unquantifiable impact on the Quebec motor vehicle accident rate, but the no fault impact was small compared to the impact of compulsory insurance and flat premium rating. (538)

F113. Tort law's capacity for fairness and justice should not be ignored. The moral neutrality of some motor vehicle accidents cannot withstand even anecdotal analysis. The public's expectations and sense of fairness would be offended if the more seriously injured were not permitted to have access to compensation for both economic and non-economic loss assessed on an individual case-by-case basis. The public's sense of fairness will not be satisfied if fault is left to be dealt with solely through the criminal justice system and the premium rating system. (545-549)

F114. The insurance industry's flexibility is more than sufficient to deliver benefits and compensation in any reasonable compensation scheme. (550)

F115. The threshold proposed by the I.B.C. in its submission to the Inquiry is inappropriate.

F116. A prevailing shortcoming of the insurance industry at the claims level is in the delivery of first party benefits. It is unrealistic to conclude that upon conversion to a form of no fault compensation plan, claims-related dealings between insurer and insured will be substantially improved. (561)

F117. Establishing a no fault automobile insurance compensation scheme as a first step to a more comprehensive no fault compensation plan may make it less likely, not more likely, that a more comprehensive compensation plan could eventually be implemented. (564-565)

F118. The efficiency assumptions made by the Ontario Task Force on Insurance are in error. A no fault system in which policies are sold on an individual basis cannot return 80¢ to 90¢ of the premium dollar to claimants. (565)

F119. A motor vehicle accident compensation system should deal humanely with all those who are injured and provide reasonably generous rehabilitation and long-term care benefits on a no fault basis, while at the same time preserving a compensation distinction between those who cause accidents and those who do not. (567)

F120. Threshold no fault should be rejected because it is relatively inefficient and unnecessarily arbitrary. There will either be no or minimal savings on transaction costs in threshold no fault. (567)

F121. Pure no fault should be rejected on fairness and deterrence grounds and because it is manifest that few seem to want it. While there are clear benefits to pure no fault compensation from a cost efficiency standpoint, appropriate social policy cannot be judged solely on a cost basis. (568)

F122. While continued use of the tort system on its own cannot be justified on compensation grounds, this does not require abandonment of the tort system.

F123. There is no valid reason why the provision of humane no fault benefits and tort law cannot co-exist. The preservation of fault-based access to individualized compensation accords with the public's sense of what is right and, in a modest way, may achieve some deterrence benefits. The criticism of the tort system on compensation grounds is answered by the availability of fair and comprehensive no fault benefits. (568-569)

F124. The legitimacy of the co-existence of no fault and tort requires first that there be a substantial expansion of the quantum of no fault benefits and the eligibility criteria for these benefits; and second, that the compensation plan be capable of being delivered through the automobile insurance system at a reasonable cost. (569)

F125. The quantum of the no fault income replacement benefit must be increased to provide economic stability for those injured in motor vehicle accidents; it is, however, inappropriate to establish an inordinately high income replacement benefit bearing in mind that it is compulsory for Ontario's drivers to buy this coverage. (574)

F126. Those injured in motor vehicle accidents should not have access to no fault benefits significantly higher or lower than the benefits available to those injured in the workplace. (575)

F127. A seven-day waiting period before the receipt of no fault benefits will eliminate the incentive to stay off work now built into the system and will also reduce transaction costs for short-term cases.

F128. The death benefit should not be linked to the deceased's income, but should rather provide some reasonable short-term financial assistance to survivors, responsive to the simple recognition of the value of life. The death benefit should be modest, but not insignificant. (580)

F129. If the proposed changes are implemented, Ontario's motorists will be the beneficiaries of substantially increased no fault benefits at moderately reduced cost and without the collateral sacrifice of any right to individual compensation under tort law. Total cost savings should be approximately $65 million. Overall, the proposed changes will result in an estimated loss cost decrease of $12.52 per car. The estimated cost reduction will also have a ripple effect which will serve to further reduce costs and premiums. Premium decreases should at least equal cost savings. (585-587)

F130. The calculation of income loss, particularly past income loss, on a pre-tax basis should be considered. If past income loss were dealt with on an after-tax basis, cost savings would be about $6 per car. If future income loss were dealt with on an after-tax basis, there would be further cost savings of about $4 per car. If all income loss were assessed on an after-tax basis, the abolition of the collateral source rule would result in a further savings of approximately $7 per car. (589)

F131. The proposed changes will result in a per motorcycle cost increase of approximately $31 with subrogation and $85 without subrogation. (590)

F132. The proposed changes will result in a cost savings of approximately $24 per commercial vehicle (ordinary truck). (593)

F133. On any reasonable cost benefit analysis, truly small cases do not fare well in the tort system. A fair threshold should focus on cases that legitimately involve injury and disability of a minor nature. Rather than denying the less seriously injured any compensation for pain and suffering and loss of enjoyment of life, the entitlement to non-pecuniary general damages of the less seriously injured should be limited or capped. (597-598)

R86. A comprehensive compensation plan for accidental injuries or beyond that, a universal disability program should be given further consideration at the federal and provincial levels. (517-518)

No Fault Benefits (Accident Benefits)

R87. The standard form of automobile insurance policy should be expanded to provide no fault accident benefits without exclusions related to driving conduct. (570)

R88. The rehabilitation benefit should be increased from $25,000 to $500,000 per claim. The time limit should be increased from 4 years to 10 years, or 20 years less the victim's age, whichever is longer. (571)

R89. Rehabilitation should be expansively and clearly defined so as to remove doubt as to the first party insurers' obligation to fund physical and vocational rehabilitation. (571)

R90. Rehabilitation should be paid for at the first party level, not on an expense-incurred-only basis, *but rather by giving the claimant, the claimant's medical advisors and the claimant's medical rehabilitation counsellors the benefit of the doubt. (572)*

R91. *Long-term care should be separated from rehabilitation and fixed at $500,000. The family of the injured person should not be excluded from long-term care compensation entitlement. Long-term care benefits should be no greater than the monthly cost of group residence which might reasonably accommodate the insured's needs having in mind the nature of the injuries and any other relevant factors. (573)*

R92. *The disability benefit for the employed should be based upon 80% of the claimant's gross income and should be increased from $140 per week to a maximum of $450 per week. Except for U.I.C. benefits, disability benefits should be non-primary. (574-575)*

R93. *Disability benefits for the employed should not be paid for the first seven days. (576)*

R94. *Disability benefits for the employed should extend for life. (576)*

R95. *Eligibility for disability benefits for the deemed to be employed should commence at age 16 not age 18, and terminate at age 65. The deemed to be employed disability benefit should be subject to a 60-day waiting period. (577-578)*

R96. *Once eligible for disability benefits, an insured* *deemed to be employed should be entitled to the same benefit as the employed. (578)*

R97. *A student should receive no fault compensation as follows:*

- *(a) if in elementary school, $1,000 for each school year lost;*
- *(b) if in secondary school, $2,000 for each school year lost;*
- *(c) if in college or university, $4,000 for each year of education lost to a cumulative maximum of three years or, if a semester is lost, the appropriate part of $4,000 according to the university's semester system;*
- *(d) $340 per week at age 19 if disabled and not attending school. (579-580)*

R98. *The death benefit should be increased to $25,000 for the death of the head of the household or the death of the spouse of the head of the household. An additional $10,000 should be paid for each dependant of the head of the household or spouse. (581)*

R99. *The funeral benefit should be increased to $3,000. (581)*

R100. *There should be a home care benefit in the amount of $50 per week maximum payable on a reasonable expense incurred basis. There should be a seven-day waiting period for this benefit. The standard of disability should be the same as for regular disability benefits. (582)*

R101. *There should be a child care benefit in the amount* *of $200 per week. An additional $50 per child or dependant per week should be payable to a maximum of $350 per week. The benefit should be paid for two weeks without presentation of receipts and thereafter in response to reasonable and proven expenses to the maximum. There should be no family member exclusion. The standard of disability should be the same as for regular disability benefits. (582)*

R102. All accident benefits other than the death benefit should be indexed once a year to the annual Consumer Price Index subject to a cumulative maximum of twice the stipulated benefit. (593)

Related Matters

R103. Because the expanded no fault benefits will provide a relatively severe premium problem for motorcycles, subrogation for motorcycles should be permitted. (590)

R104. Accident benefit claims forms should be common to all licensed insurers. The forms should be simplified and colour coded so that one form is not confused with another. (594)

R105. Those in hospital for more than seven days should be paid the first two weeks of accident benefits entitlement without a medical report unless there are circumstances which clearly and unequivocally suggest that payment is inappropriate. (594)

R106. Adjusters should be given specific disability benefit authority in the amount of $2,000. (594)

R107. *Claimants should pay for the cost of obtaining reasonably required disability benefit medical report forms for the first three months of disability and thereafter the cost of these short medical reports should be borne by the insurer. (594)*

R108. *Insurers and the medical profession should try to reach an agreement on an acceptable fair fee for disability benefit medical reports; alternatively a reasonable fee should be built into the O.H.I.P. fee schedule. (594-595)*

R109. *Section B forms should be delivered immediately to the injured insured if the insured is in hospital and mailed or delivered to the insured if the insured is not in hospital. The onus of delivery of the required forms should be on the insurer. Hospitals (particularly emergency wards) should be provided with no fault medical forms and if practicable the other forms as well. (595)*

R110. *Efforts should be made to coordinate the automobile insurance no fault forms with those of Workers' Compensation, U.I.C., Canada Pension Plan and long-term disability carriers. (595)*

R111. *The Insurance Act should be amended to provide the insured's physician or the insured's treating chiropractor with the required authority to complete the disability benefit medical form and remit it to the insured's insurer. (595)*

R112. *The calculation of the disability benefit should be made available to the insured. (596)*

R113. *The 30-day return to work provision contained in the automobile insurance policy should be increased to 90 days. (596)*

R114. *Disability benefits should be paid within 15 days of the insurer's receipt of the required forms. (596)*

R115. *If a form of no fault compensation plan is desired, consideration should be given to a modified threshold plan in which non-pecuniary general damages in less serious cases (as defined by a moderate verbal threshold) are capped with the result that in those less serious cases which do not meet the defined threshold, non-pecuniary general damages will be limited to a maximum of $3,000. (598)*

H. OTHER INSURANCE AND CONSUMER ISSUES (Chapter 13)

Catastrophic Claims Fund

R116. *There is no need to establish a Catastrophic Claims Fund in Ontario. (601)*

Consumer Information

R117. *Typical premiums or premiums set by the Board should be publicized and explained. (602)*

R118. *Consumers should have access to claims information including:*

- *(a) the insured's entitlement to no fault benefits and the quantum of those benefits;*
- *(b) procedures to be followed in asserting third party claims;*

(c) the availability of dispute resolution mechanisms;

(d) the availability of social programmes which might be of relevance to a person injured in a motor vehicle accident;

(e) the consumer's right to challenge legal fees through the assessment process in those cases where an insured has retained a lawyer;

(f) particulars of any relevant limitation periods. (603)

R119. The provision of information to consumers should be dealt with through the office of the Superintendent of Insurance. The Superintendent's office should be expanded to accommodate the required dissemination of information. (603)

Claims and Underwriting Practices

R120. The Ontario Government should enact unfair claims practices legislation. Claims standards which should be the subject of regulation include:

(a) an injured insured should be provided with all required no fault documentation within seven days of the accident;

(b) no fault benefits should be paid within 15 days of the insurer's receipt of required documentation;

(c) no fault claims forms should include instructions as to processing the claim and the telephone number of a named insurance company representative;

(d) if an insurer is reasonably required to continue investigating a claim beyond the 15-day period, where practicable the insurer

should notify its insured of that fact and provide information as to the expected date when the investigation will be completed;

(e) *if a claim is denied on the basis of a specific policy provision, condition or exclusion, the insurer should be required to give specific information as to the provision, condition or exclusion being relied upon;*

(f) *payment of any first party benefits should be accompanied by an explanation of what the payment is for;*

(g) *no insurer should be permitted to refuse to pay all or part of any first or third party claim where there is no reasonable good faith dispute as to the insured's or the claimant's entitlement;*

(h) *no insurer should require an insured or claimant to sign a release extending beyond the subject matter giving rise to the claim payment;*

(i) *if a first party claim is denied on the basis of a medical opinion secured by the insurer, the insurer should be given a copy of the medical report. Insurers should be prohibited from denying first party claims based on verbal medical reports;*

(j) *an insurer requiring a medical examination of an insured should be required to continue first party benefit payments pending the completion of the medical examination and the insurer's receipt of a medical report;*

(k) *insurers should be obliged to fund reasonable rehabilitation if there is credible medical evidence and in appropriate circumstances the evidence of a rehabilitation consultant supporting the proposed rehabilitation. If an* *insured refuses to undertake or continue rehabilitation that has been recommended by his own medical advisor or the insurer's medical advisor, the insurer's obligation to pay disability benefits should continue until the issue has been dealt with through dispute resolution. (604-607)*

R121. *The Superintendent of Insurance should be given power to adopt rules to ensure the prompt, fair and honest processing of claims and complaints. (607)*

R122. *Insurers should face the prospect of reasonable financial penalties to a maximum of $10,000 for unacceptable claims and underwriting practices. Hearings dealing with any alleged unfair claims or underwriting practice should be conducted by the Superintendent of Insurance or the Superintendent's nominee. The hearings should be relatively informal and subject to appeal only by way of judicial review. (607)*

R123. *An insured who has received delayed or no payment of a first party benefit entitlement should be then entitled to interest at twice the prime rate. (607)*

R124. *The Superintendent of Insurance should have jurisdiction to respond to proved underwriting abuses and to impose appropriate penalties. (608)*

Dispute Resolution

R125. *As a first step to resolving disputes concerning accident benefits, the I.B.C.'s review committee proposal should be accepted. Every insurer should designate one representative to be responsible for* *review of no fault benefit payment decisions. The review committee decision will be binding on the insurer but not the insured. (609)*

R126. *In the event an insured is dissatisfied with the decision of a review committee the insured should have access to arbitration or the courts by a* *__de novo__* *hearing. (604)*

R127. *The Bar and the insurance industry after joint consultation should establish a regionalized roster of acceptable arbitrators in order to deal with first party automobile insurance policy disputes. (609)*

R128. *Serious consideration ought to be given to establishing an arbitration division within the court structure. (610)*

Uninsured Drivers

R129. *The fine for driving without insurance coverage should be increased. Anyone convicted of driving without insurance should be exposed to an automatic licence suspension in addition to a fine. Driving privileges should not be restored until the offender has filed proof of financial responsibility. (612)*

Information Systems

R130. *The Ministry of Transportation and Communications should act immediately to transfer driver records to computer. The information should be available on-line to any licensed Ontario automobile insurer for a yearly fee based on market share. (615)*

R131. A cooperative information network should be established between the Registrar of Motor Vehicles and licensed Ontario automobile insurers to permit the immediate verification of automobile insurance coverage. (615-616)

R132. All licensed Ontario automobile insurers should be required to be part of an information system and therefore should be required to submit claims histories of their insureds to the database; all insurers should have access to that information. (616)

I. CONSTITUTIONAL CONSIDERATIONS (Chapter 14)

F134. The province, by virtue of section 92(13) of the Constitution Act, 1867 has legislative authority to create, modify or abrogate causes of action in tort; equally a province has legislative authority in relation to automobile insurance and the authority to enact a no fault compensation plan. (619)

F135. The administration of a no fault motor vehicle accident plan by an administrative agency rather than the courts does not offend section 96 of the Constitution Act. (619)

F136. Replacing the right to sue in tort with a no fault plan does not infringe section 7 of the Canadian Charter of Rights and Freedoms. (621-623)

F137. An automobile no fault plan does not infringe section 15 of the Charter. (630-631)

F138. Threshold schemes are constitutionally more vulnerable than pure no fault schemes but a reasonable threshold scheme would on balance not infringe section 15 of the Charter. (639)

F139. Even if a no fault or threshold scheme infringed either section 7 or section 15 of the Charter they would be justified under section 1 of the Charter. (640-641)

F140. While the use of age 65 as a cut-off point for eligibility for no fault automobile disability benefits may be vulnerable to a challenge under section 15 of the Charter, it would likely be justified under section 1. (642)

F141. It would not offend section 15 of the Charter to distinguish between those actively employed and those deemed to be employed by providing an age 65 termination date for disability benefit eligibility for the latter. (643)

F142. The age 18 commencement date for those deemed to be employed likely infringes section 15 of the Charter and cannot be justified under section 1. (643)

F143. The use of age as a premium rating variable is more likely to survive a Charter challenge than the use of sex. (648)

R133. Further consideration ought to be given to the extent to which neutral classification factors can be developed which are accurate substitutes for age or sex. (650)

J. PUBLIC OR PRIVATE DELIVERY OF AUTOMOBILE INSURANCE (Chapter 15)

F144. Interprovincial premium comparisons are at best unhelpful and at worst misleading in assessing the comparative cost efficiency of public and private delivery systems. (671)

F145. The simple classification systems used in the public plans result in extensive cross-subsidization of high risk drivers by low risk drivers. (667)

F146. Cross-subsidization does not occur in Ontario's private sector competitive delivery system except in the residual market (the Facility Association). (666)

F147. A decision to nationalize Ontario's automobile insurance industry would have the following potential consequences:

(a) There would be very significant financial and organizational implementation requirements.

(b) Some of those now employed in the insurance industry would lose their jobs; to retain their jobs, others would have to relocate.

(c) Excluding the private sector from all or virtually all of the Ontario market may limit industry involvement in the remainder of the Canadian automobile insurance market and may create a shortfall in capacity in general insurance lines. (672-674)

F148. A public monopoly insurer will not achieve any efficiency gains attributable to economies of scale compared to major Ontario insurers. (677)

F149. Public monopoly automobile insurance has the potential to achieve cost savings when compared to a competitive automobile insurance industry in the private sector. The most important cost savings is lower business acquisition costs (mainly broker commissions); a less significant cost savings results from the probable use of a simplified classification system, or in the extreme as in Quebec and Saskatchewan, no classification system. These potential cost advantages depend not on the difference between public and private delivery, but on the difference between monopoly and competitive delivery. (683-684)

F150. The maximum potential cost savings that could be achieved by a public monopoly insurer is approximately 7% which translates into a premium reduction of about $43 per car. (687)

F151. If a simplified (or no) classification system is adopted, the impact of the aggregate cost savings will affect different insureds differently. The beneficiaries of the premium reduction will be Ontario's high risk drivers. Because of the change in the classification system, over 40% of Ontario's drivers who are now classified as low risk drivers will face premium increases on conversion to public automobile insurance. If a public monopoly insurer were to use a more complex classification system, potential cost savings would be reduced. (687-688)

F152. The start-up costs of a public automobile insurance corporation, the elimination of the benefits of competition and the likely increase in the number of high risk drivers (and therefore claims costs) will reduce, if not eliminate entirely, the potential for cost savings from conversion to public automobile insurance. (688-690)

F153. Freedom of choice and the benefits of competition are undeniable advantages of Ontario's private sector delivery system. (692)

F154. Cross-subsidization of high risk drivers by low risk drivers that is characteristic of the public plans is neither fair nor equitable. (692-693)

F155. The ability to integrate licensing and insurance requirements is an advantage of public automobile insurance. (697)

F156. The interest in and opportunities for the promotion of traffic safety are likely to be greater in a public than a private delivery system. Nevertheless, the government's interest in traffic safety and its commitment to accident prevention should not depend upon whether it is responsible for the automobile insurance system. (699)

F157. Automobile repair costs are lower in a private system than in a public system. (699-700)

F158. The fact that public plans pay no corporate income tax means that the loss of corporate tax revenues will result in higher taxes in other areas. This is an indirect subsidy. (700)

F159. There is no justification for a policy on the part of a public insurer to invest within the province; over 70% of one public insurer's (I.C.B.C.) investments are out of the province. (700-701)

F160. There is no evidence to suggest that the consumers in the public plans are more or less satisfied than consumers in Ontario. This is particularly evident now that consumers in the public plans are faced with substantial premium increases. (701)

F161. Ontario taxpayers and drivers would not benefit from the conversion to public automobile insurance. The modest potential for cost savings particularly in the area of business acquisition costs would be offset in the short run by the substantial start-up costs of a public plan and would be completely eroded in the longer term by other cost-based considerations, particularly the elimination of the potential for lower premiums derived from competition. (708-709)

F162. There are no compelling social benefits or other non-economic justifications which support the case for public automobile insurance. An assessment of factors unrelated to cost efficiency reinforces the case against public monopoly. (709)

R134. The Government of Ontario should not introduce public automobile insurance. (709)

K. RATE REGULATION (Chapter 16)

F163. Some form of rate regulation, that is, some outside review of insurers' premiums is socially, if not economically, desirable. The public is entitled to some external protection against unreasonable or unjust premiums; at the same time, rate regulation should bring a measure of stability to the market. (720-721)

F164. The structure of the automobile insurance market in Ontario is consistent with a highly competitive industry. The large number of firms in the industry and their relative size distribution make collusion or cartel-like behaviour unlikely. (727)

F165. The conclusion that the automobile insurance industry in Ontario is competitive must be qualified in three respects:

- (a) The broker and agent distribution system fragments the competitive market.
- (b) In some particular markets (for example taxis), the competition is quite limited.
- (c) The residual market, the Facility Association, is non-competitive. (727-728)

F166. The two dominant objectives of rate regulation should be premium fairness as assessed against sound insurance principles and market stability which will enure to the eventual benefit of the public. Appropriate rate regulation should provide a cost efficient mechanism for ensuring that premiums charged by individual insurers are fair and for ensuring market stability. (728-729)

F167. The proposed rate regulation legislation will inhibit insurers from being innovative in their rating procedures. (729)

F168. The public utility model of regulation, upon which the proposed rate regulation legislation is based, is inappropriate to a competitive industry even if the product is compulsory. (731)

F169. Industry-wide hearings will produce rates or ranges of rates that in many instances are higher than those that might be generated by competitive pricing with the result that the public will be denied the benefits of true competition. On a more specific level consumers will be denied the benefit of lower than benchmark rates which would be charged by the more efficient insurers in a truly competitive market. (731-732)

F170. The form of the process contemplated by the proposed rate regulation legislation will result in increased costs which will inevitably be passed on to consumers. The substance of the process will deny consumers access to the lower premiums generated by the more efficient insurers in a competitive market. (733)

F171. Without the provision of funding, public participation at industry-wide hearings cannot be meaningful. (734)

F172. The premiums in the Facility Association are lower than the expected loss costs of those who populate the Facility Association suggest they should be, inevitably resulting in a measure of cross-subsidization. Thus, approval of Facility Association rates will involve substantial social policy considerations. (735-736)

R135. *The Government of Ontario should enact rate regulation legislation. The legislation should provide for the establishment of an independent board to review and approve the rates of individual insurers. (720-721)*

R136. *The Government of Ontario should not enact the proposed Ontario Automobile Insurance Board Act, 1987 in its present form. Specifically, the Board should not have the power to set rates. The Board's power should be limited to rate approval. (731-732)*

R137. *Whatever rate approval process is adopted, it should be one which will not unduly inhibit competition. (734)*

R138. *The Board should have the express power to approve deviated rates even where refinements to the classification system are involved, provided that the rates are otherwise just, reasonable and sound in principle. (729-730)*

R139. *Alternatively, the Board should have direct jurisdiction over the classification system and an unfettered power to modify it. (729-730)*

R140. *To the extent the legislation permits public participation at Board hearings, the Government should make available reasonable funding in order to ensure that public participation is meaningful. (734)*

R141. *For clean risks the former Facility ceding arrangements should be put in place. This ceding should occur at an insurer's book premiums unless the insurer's premiums are below the range of rates set by the Board. (736-737)*

R142. *The Superintendent of Insurance should be permitted to participate in the Facility Association premium approval process, in order to ensure that the public interest is represented. (737-738)*

L. MOTOR VEHICLE ACCIDENT PREVENTION (Chapter 17)

F172. Those killed in motor vehicle accidents tend to be young, healthy and male. Motor vehicle accidents are the leading cause of death for males between the ages of 15 and 24. (740)

F173. In 1985 dollars, economic loss resulting from Ontario motor vehicle accidents is approximately $1.7 billion. (742)

F174. The reduction in speed limits has worked to reduce accident frequency and severity; mandatory seat belt legislation has worked to reduce accident severity. (760-761)

R143. Responsibility for traffic safety should be reposed in one government department or independent agency. (752-753)

R144. Speed variation increases the risk of accidents and should be controlled. Both minimum and maximum speed limits should be enforced. (760)

R145. Parents charged with failing to use child restraints in motor vehicles should be given the choice of paying the fine or establishing to the court that a child restraint has been purchased, rented or borrowed. (762)

R146. The legal age for drinking and the legal age for driving should be given further study. (767)

R147. Driver education should be taught at a much younger age than 15; it should be taught as part of a course in acceptable social behaviour and not as part of a crash course leading to the acquisition of a driver's licence. (767)

Rapport de l'enquête sur l'indemnisation des victimes d'accidents d'automobiles en Ontario

Monsieur le juge
Coulter A. Osborne
Cour suprême de l'Ontario
Commissaire

SOMMAIRE DES CONCLUSIONS
ET RECOMMANDATIONS

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SOMMAIRE DES CONCLUSIONS ET RECOMMANDATIONS

Le décret qui institue cette enquête mentionne onze questions; cependant, deux questions sont particulièrement importantes : l'assurance-automobile sans égard à la responsabilité et l'assurance-automobile publique.

L'assurance-automobile sans égard à la responsabilité n'est pas un concept nouveau. Elle avait déjà été recommandée en 1932 dans ce qu'on appelle le rapport Columbia. Une forme d'assurance-automobile sans égard à la responsabilité a été proposée par les professeurs Keeton et O'Connell en 1965. En Ontario, l'assurance-automobile sans égard à la responsabilité a été recommandée par la Commission de réforme du droit de l'Ontario en 1973 et, sous une forme modifiée, par le Comité spécial sur le droit des compagnies en 1978 et par le Groupe de travail sur l'assurance de l'Ontario en 1986. Nous avons l'indemnisation sans égard à la responsabilité pour les blessures dans le lieu de travail depuis 1914 en Ontario et l'indemnisation sans égard à la responsabilité fait partie de la police d'assurance-automobile de l'Ontario depuis 1972.

L'assurance-automobile sans égard à la responsabilité avec seuil ("threshold") constitue un compromis américain entre le système sans égard à la responsabilité et le système de responsabilité civile. Le système américain a été instauré au cours des années 1970. En vertu de ce système, des prestations supérieures sont financées en refusant aux victimes de blessures moins graves une indemnisation au titre des douleurs et souffrances.

En essayant de trouver le bon système d'indemnisation pour les victimes d'accidents d'automobiles en Ontario, j'ai examiné ce qui s'est fait ailleurs, notamment au Québec, en

Australie, en Nouvelle-Zélande, en Grande-Bretagne, en Suisse, en France, en Allemagne de l'Ouest et dans un certain nombre d'États américains. Il m'est vite apparu évident que l'indemnisation des victimes d'accidents d'automobiles ne devrait pas être étudiée en vase clos. On devrait tenir compte des conditions sociales, des régimes existants de prestations d'invalidité à court et à long terme, et des programmes sociaux en vigueur.

Notre province offre un régime universel d'assurance-maladie pour les services médicaux et hospitaliers. La surfacturation est interdite. L'indemnisation sans égard à la responsabilité fait partie de la police standard d'assurance-automobile. Le minimum pour l'assurance responsabilité civile a été fixé à 200 000 $; l'automobiliste moyen possède une assurance de plus de 500 000 $. L'assurance-automobile est obligatoire. Moins de 2 % des automobilistes de l'Ontario ne sont pas assurés. Tous les automobilistes de l'Ontario sont protégés contre les conducteurs non assurés et non identifiés. Plus de 90 % des automobilistes de l'Ontario sont protégés contre la sous-assurance. L'indemnisation pour les pertes non économiques est limitée à 100 000 $ (en dollars de 1978). Les verdicts des jurés peuvent faire l'objet d'une révision judiciaire raisonnable par nos tribunaux d'appel. Les procès relatifs à des accidents d'automobiles ne congestionnent pas nos tribunaux.

Les coûts de plus en plus élevés des indemnités au titre des dommages corporels ont amené certains à conclure que l'Ontario deviendra bientôt la "Californie du Nord", si ce n'est déjà fait. Cette conclusion ne m'apparaît pas très solide. On l'appuie toujours sur des arguments superficiels, des données qui confirment l'augmentation incessante des indemnités pour les dommages corporels et le renvoi à la même cause : McErlean v. City of Brampton. J'ai décidé d'ignorer les arguments superficiels et j'ai tenté de déterminer si les coûts des sinistres au titre des dommages corporels ont réellement augmenté ainsi que les raisons de cette augmentation. La pertinence de la cause McErlean, qu'on invoque toujours pour justifier la thèse de la "Californie du Nord", a beaucoup souffert de l'annulation, par la Cour d'appel, du jugement en première instance en ce qui concerne la responsabilité et les dommages. La décision de la Cour d'appel me semble avoir atténué le sentiment d'angoisse de certains segments des industries de l'assurance et de la réassurance. Je note, dans la livraison de novembre 1987 du Canadian Underwriter, ce commentaire à la suite d'une mention du jugement de la Cour d'appel : "Goodbye California of the North".

L'assurance sans égard à la responsabilité avec seuil a été recommandée par beaucoup de groupes, dont le Bureau d'assurance du Canada (B.A.C.). Le régime qu'on examine le plus souvent à cet égard est celui qui est en vigueur dans l'État du Michigan. J'ai jugé bon d'examiner en détail le régime d'assurance sans égard à la responsabilité avec seuil du Michigan. Je me suis rendu dans cet État, j'ai discuté du régime avec des législateurs locaux, le commissaire de l'assurance du Michigan et ses collaborateurs. J'ai demandé l'avis de juges et d'avocats du Michigan en ce qui concerne des questions relatives à l'indemnisation et à l'assurance. En fin de compte, je crois savoir pourquoi le Michigan a instauré l'assurance-automobile sans égard à la responsabilité avec seuil et les raisons pour lesquelles ce régime fonctionne bien.

Les conditions sociales et la situation de l'assurance en Ontario sont très différentes de celles qui entouraient le débat sur l'indemnisation des victimes d'accidents d'automobiles au Michigan au cours des années 1970. Pour des raisons que j'élaborerai dans le corps du rapport, j'ai conclu que, à part un peu plus de stabilité pour les compagnies d'assurance-automobile, les diminutions des coûts et des primes seraient modestes si nous devions adopter l'assurance sans égard à la responsabilité avec seuil et ces faibles économies se feraient aux dépens des 90 % et plus des victimes d'accidents d'automobiles de l'Ontario qui ont actuellement le droit de demander une indemnisation pour les pertes non économiques.

Je tiens à souligner dès le départ que, si le seul système de responsabilité civile devait constituer une option d'indemnisation, je le rejetterais d'emblée. Cependant, une coexistence pacifique est possible entre le système de responsabilité civile et l'assurance sans égard à la responsabilité. De bons programmes de réadaptation et de soins à long terme peuvent être fournis sans égard à la responsabilité. Il est également possible de payer de cette façon les prestations de décès, les prestations pour le remplacement du revenu, et les prestations au titre de l'aide familiale et du soin des enfants. On peut le faire à un coût raisonnable et sans miner les valeurs propres au droit de la responsabilité civile que j'envisage d'étendre au-delà des périmètres de l'indemnisation et de la dissuasion.

Je n'accepte pas l'argument selon lequel l'assurance-automobile sans égard à la responsabilité ou l'assurance-automobile sans égard à la responsabilité avec seuil constitue une première étape justifiée vers un régime complet d'indemnisation contre les accidents ou l'invalidité. Je conviens qu'on devrait examiner plus à fond un régime complet d'indemnisation; cependant, sur le plan pratique, nous ne sommes pas du tout prêts à mettre en oeuvre un régime d'indemnisation complet pour les victimes d'accidents ou les personnes invalides. La deuxième étape est trop loin de la première étape. Par conséquent, il faut examiner la première étape de façon isolée. Il existe actuellement des problèmes qui exigent des solutions immédiates et fondées sur le bon sens. Il m'apparaît réaliste, mises à part les dispositions du décret qui institue la présente enquête, d'examiner en toute objectivité l'assurance-automobile sans égard à la responsabilité.

Après avoir étudié, avec équité je l'espère, toutes les positions, je suis arrivé à la conclusion que le système actuel d'indemnisation sans égard à la responsabilité doit être considérablement élargi, qu'il doit être véritablement sans égard à la responsabilité et qu'il faut maintenir le droit des personnes à l'indemnisation en vertu du système de responsabilité civile. Le système que je propose diminue la nécessité d'intenter des poursuites mais maintient le droit de le faire. Ayant examiné un grand nombre de régimes d'indemnisation, il me semble, que, même si notre régime n'est pas parfait, l'Ontario devrait "exporter" et non "importer" des régimes d'indemnisation.

Il y a également la question de l'assurance-automobile publique. Le Québec, le Manitoba, la Saskatchewan et la Colombie-Britannique fournissent l'assurance-automobile par le biais de monopoles publics. Le régime de la Saskatchewan est en vigueur depuis 1946. Il est vrai que l'Ontario a une économie de marché libre depuis longtemps mais l'assurance-automobile publique au Canada existe déjà depuis un bon moment dans quatre des dix provinces canadiennes. J'ai étudié attentivement l'expérience des provinces qui ont des régimes publics.

J'ai abordé la question de l'assurance-automobile publique en répondant à cette question importante : les automobilistes de l'Ontario vont-ils bénéficier de gains d'efficacité et donc de primes moins élevées si l'Ontario fournit l'assurance-automobile par le biais d'un monopole public?

Faute de preuves claires et convaincantes de gains d'efficacité, il me semble qu'il n'est pas plus justifié de nationaliser l'industrie de l'assurance-automobile que n'importe quelle autre industrie.

Même si, à bien des égards, le secteur privé de l'assurance-automobile a été son propre ennemi, une sage réglementation des tarifs et un contrôle externe raisonnable des demandes d'indemnité et des pratiques de souscription devraient permettre d'éliminer bon nombre des problèmes dont se sont plaints à bon droit des consommateurs. Il n'existe aucune preuve fiable démontrant que les consommateurs vont obtenir des avantages si l'Ontario nationalise l'industrie de l'assurance-automobile et fournit cette assurance par le biais d'un monopole public.

Les pages qui suivent donnent un sommaire des principales conclusions et des recommandations contenues dans le rapport. Les conclusions et les recommandations sont énumérées par sujet. Les conclusions sont précédées de la lettre "C" et les recommandations, de la lettre "R". Les chiffres indiqués entre parenthèses après les conclusions et les recommandations renvoient aux pages du rapport où se trouvent ces conclusions ou recommandations.

A. L'INDUSTRIE DE L'ASSURANCE-AUTOMOBILE EN ONTARIO (Chapitre 4)

Structure

C1. Le marché de l'assurance-automobile en Ontario n'est pas concentré. D'après les encaissements de primes, les dix principaux assureurs de l'Ontario détiennent 53 % du marché et les vingt principaux assureurs, 74 % du marché. (95)

C2. Environ 98 % des propriétaires d'automobiles de l'Ontario sont assurés. (97)

C3. Au mois d'août 1987, 1,7 % des voitures de tourisme de l'Ontario étaient assurées par l'intermédiaire de l'Association des assureurs. Les primes de base de l'Association des assureurs pour les voitures de tourisme s'élevaient à environ 205 % des primes moyennes pondérées de l'industrie. À la fin de son exercice de 1986, l'Association des assureurs accusait un déficit de 29,6 millions de dollars de ses dépenses par rapport à ses revenus; les pertes de l'Ontario représentent 52 % des pertes totales pour le Canada, soit plus que toutes les autres provinces réunies. (101-102)

C4. 28,79 % des automobilistes assurés par l'Association des assureurs ont cinq ans sans accident; 80,79 % des automobilistes assurés sur le marché ordinaire ont cinq ans sans accident. (105)

C5. Les pertes pour les taxis de Toronto sont tellement importantes que, même avec les primes élevées de l'Association des assureurs, les risques pour les taxis sont presque inassurables. En 1985, 3,6 % des taxis du territoire de Toronto étaient assurés par l'intermédiaire de l'Association des assureurs; en 1986, la proportion était de 50,3 %. Le marché ordinaire a cessé d'assurer les taxis, sauf dans le cas des taxis exploités par leurs propriétaires et, dans certains cas, les taxis coopératifs. (107-108)

C6. Les automobilistes de l'Ontario qui sont assurés sur le marché ordinaire subventionnent, par leurs primes, ceux qui sont assurés par l'Association des assureurs. (109)

Commercialisation

C7. Si on se fonde sur les primes, environ 74 % des polices d'assurance-automobile qui sont vendues en Ontario le sont par l'intermédiaire de courtiers; presque toutes les autres sont commercialisées par l'entremise d'agents de vente directe. (109)

C8. Un courtier peut représenter un certain nombre d'assureurs et même un seul assureur (à part un assureur de l'Association des assureurs). (111-112)

C9. Les courtiers font partie intégrante du système de l'assurance-automobile de l'Ontario et il continuera probablement d'en être ainsi. (113)

C10. Les courtiers ne sont plus indépendants lorsqu'ils ne représentent qu'une seule compagnie d'assurance. Leur survie financière dépend largement des assureurs qu'ils représentent. (114)

C11. Les assureurs offrent à leurs courtiers diverses primes et récompenses, dont le coût a pour effet d'augmenter les frais d'acquisition des affaires et, éventuellement, les primes. (114)

C12. La structure établie entre les assureurs et les courtiers favorise les conflits. Le courtier choisit souvent un assureur pour un certain nombre de raisons que ne connaît pas le demandeur de l'assurance-automobile. (114)

C13. Le montant de la commission du courtier n'est à peu près jamais divulgué au consommateur; celui-ci ne connaît ni le pourcentage de la commission ni les différences entre les commissions des assureurs que le courtier représente. (114)

C14. Le courtier n'est pas tenu de divulguer et bien souvent ne divulgue pas les primes des autres compagnies d'assurance, pas même celles des assureurs qu'il représente. Par conséquent, le consommateur dispose, dans bien des cas, de renseignements limités sur les primes des autres assureurs que représente le courtier et n'a pas de renseignements sur les compagnies qui ne sont pas représentées par le courtier. (115)

C15. Le droit d'un courtier de représenter un assureur peut habituellement être résilié par un avis relativement court. Cette résiliation peut nuire à la fois à l'assuré et au courtier. (115)

C16. Un assureur résilie habituellement son contrat avec un courtier pour l'une ou l'autre des raisons suivantes : mauvais rapport sinistres/primes, combinaison inacceptable d'activités, incapacité de satisfaire aux exigences de l'assureur, répartition inégale des affaires et insuffisance du chiffre d'affaires. (116)

C17. Les assureurs ne devraient pas être autorisés à utiliser, comme critère de souscription, le nombre de fois au cours d'une période donnée qu'un demandeur d'assurance a changé d'assureurs. (128-129)

R1. Les courtiers ne devraient pas être tenus d'appartenir à une association ou organisation donnée. (110)

R2. Les programmes d'éducation parrainés par l'Insurance Brokers Association of Ontario (I.B.A.O.) et la Toronto Insurance Conference (T.I.C.) sont utiles et devraient être encouragés. (110)

R3. On devrait établir un mécanisme de contrôle permettant d'identifier les assureurs qui sont représentés par un courtier et les courtiers qui ne représentent pas *d'autres compagnies d'assurance-automobile que l'assureur de l'Association des assureurs. (111)*

R4. *À des intervalles réguliers au cours de l'année, le bureau du Surintendant des assurances devrait publier les taux de base de l'assurance-automobile afin de leur assurer une diffusion à l'échelle de la province. Le consommateur devrait être également informé des majorations habituelles. (119)*

R5. *Les courtiers et les agents devraient être tenus d'afficher bien en vue les noms des assureurs qu'ils représentent. (120)*

R6. *Chaque courtier devrait indiquer clairement son assureur de l'Association des assureurs.*

R7. *Tous les courtiers devraient être obligés, en vertu de la loi, de fournir l'accès au marché résiduel (l'Association des assureurs) par l'intermédiaire d'un assureur désigné.*

R8. *Sauf en cas de fraude, de malhonnêteté, etc., les assureurs devraient donner un avis minimum de résiliation aux courtiers. La période minimale devrait être établie par des consultations entre les assureurs et les courtiers. (120-121)*

R9. *Les assureurs qui résilient des contrats avec des courtiers devraient être tenus de justifier la résiliation. On devrait instaurer un mécanisme d'arbitrage par l'entremise du B.A.C. et de l'I.B.A.O.*

pour s'occuper des conflits entre les courtiers et les assureurs, et notamment des résiliations. (121)

R10. *L'assureur qui résilie son contrat avec un courtier en raison de la combinaison d'activités, de la répartition ou du volume des affaires, ou du rapport sinistres/primes devrait être encouragé à participer à un programme de réhabilitation avec le courtier résilié. Les compagnies et les courtiers d'assurance-automobile devraient entamer des discussions avec le Surintendant des assurances et les Registered Insurance Brokers of Ontario (R.I.B.O.) en vue d'établir des lignes directrices concernant l'utilisation des programmes de réhabilitation, surtout lorsque le rapport sinistres/primes est à l'origine de la décision d'un assureur de résilier son contrat avec un courtier. (121-122)*

R11. *Lorsqu'un assureur résilie son contrat avec un courtier, ce dernier devrait être tenu d'informer l'assuré qu'il ne représente plus cet assureur et que, si le consommateur désire conserver sa police avec cet assureur, il devrait communiquer avec l'assureur pour obtenir des renseignements sur ses autres courtiers. (123)*

R12. *En ce qui concerne la résiliation des contrats des courtiers, on devrait mettre en oeuvre les lignes directrices qui ont été établies par le B.A.C. et la Fédération canadienne des associations d'agents et de courtiers d'assurance. Le Surintendant des assurances devrait suivre de près les résiliations des contrats* *des courtiers afin de s'assurer que ces lignes directrices sont observées et que les assurés n'ont pas à payer des primes additionnelles par suite de la résiliation d'un contrat d'un courtier par un assureur. Un assuré ne devrait pas être désavantagé par des questions qui intéressent uniquement un courtier et un assureur. (123-125)*

R13. *On devrait fournir dans tous les cas la ventilation de la prime d'assurance-automobile d'un assuré, y compris la commission du courtier. (125)*

R14. *La commission versée par l'Association des assureurs au courtier n'est pas différente des autres commissions et devrait être divulguée au consommateur. (127)*

R15. *On devrait encourager les courtiers à indiquer des primes par téléphone. Ces indications ne devraient pas être exécutoires. (127)*

R16. *On devrait modifier la Loi sur l'inscription des courtiers d'assurances de manière à interdire à un courtier de représenter uniquement un assureur de l'Association des assureurs. (128)*

R17. *Les banques et les compagnies de fiducie devraient avoir le droit de vendre de l'assurance-automobile. (128)*

R18. *On devrait réexaminer l'interdiction de faire du courtage à temps partiel. (128-129)*

R19. On ne devrait pas refuser une indemnisation de l'assureur de la responsabilité civile du courtier aux assurés qui présentent une demande d'indemnité contre un courtier qui a fait preuve de négligence parce que ce dernier a enfreint des politiques. (129)

B. PROBLÈMES RELATIFS À LA PROTECTION ET À LA PRESTATION

(Chapitre 5)

Protection et prestation

C18. Il y a relativement peu de plaintes des consommateurs concernant le règlement des sinistres relatifs aux dommages corporels et aux dommages matériels. (140)

C19. Les assurés ne disposent pas vraiment d'un mécanisme pour contester l'imputation de la responsabilité, selon le barème. (141)

C20. La responsabilité civile ne devrait pas être sans limite pour des facteurs de solvabilité; même les prestations qui correspondent aux limites accrues des polices ne l'emportent pas sur les coûts. (142)

C21. Le retard dans le versement des indemnités pour dommages corporels à des tiers constitue un problème. Outre le congestionnement des tribunaux dans certaines régions, ce retard est attribuable au système de paiement en une seule fois des indemnités, qui exige que les dommages corporels et l'invalidité se stabilisent avant que le règlement ou le procès puisse être vraiment envisagé. Le problème du retard dans le cas des dommages corporels n'a rien à voir avec la police d'assurance-automobile ou les compagnies d'assurance-automobile. (143)

C22. Le retard ne constitue pas un problème pour ce qui est du règlement des sinistres pour dommages matériels. (143)

C23. Le concept du contrat de subrogation en bloc de l'O.H.I.P. est valable. Le contrat de l'O.H.I.P. a permis de réaliser des économies importantes. (146)

C24. L'O.H.I.P. subit des pertes parce que certains assurés ont conclu des arrangements spéciaux au moyen de polices de façade avec leur compagnie d'assurance-automobile. (147-148)

C25. En raison de la définition imprécise de la notion de réadaptation et de son interprétation par des assureurs, beaucoup d'assurés qui ont besoin de services de réadaptation et qui y ont droit ne les obtiennent pas. (161)

C26. L'obligation contractuelle qu'ont les assureurs de verser des prestations de réadaptation uniquement lorsque les frais de réadaptation ont été subis exerce une action déstabilisatrice et entraîne souvent le report ou même l'annulation des services de réadaptation. Le système n'a pas bien pourvu aux besoins de réadaptation des victimes d'accidents d'automobiles qui ont raisonnablement besoin de services externes de réadaptation. (162)

C27. L'assureur ne devrait pas disposer, par l'intermédiaire de son conseiller médical, d'un droit de veto prima facie sur la réadaptation proposée; l'opinion du conseiller médical de l'assuré en ce qui concerne la réadaptation et l'opinion des conseillers en réadaptation devraient avoir une valeur probante importante. (162-163)

C28. Très peu d'assureurs reconnaissent la rentabilité de la réadaptation. La date limite de quatre ans pour la réadaptation a incité certains assureurs à ignorer la réadaptation dans l'espoir que ses coûts directs vont disparaître. (163)

C29. Il faut une meilleure coordination des ressources de la médecine et de la réadaptation sans égard à la responsabilité. On devrait accroître et non diminuer les dépenses relatives à la réadaptation des quelques cas relativement rares mais très graves où la réadaptation aiderait la personne blessée. (165)

C30. Le système actuel ne comporte pas de bon mécanisme de règlement des différends. Par conséquent, dans bien des cas la réadaptation n'est pas entreprise ou l'est si longtemps après l'accident qu'elle en perd son efficacité. (165)

C31. La limite de 140 $ par semaine qui a été fixée en 1978 pour les prestations d'invalidité n'est pas suffisante. (166)

C32. La performance de l'industrie de l'assurance pour ce qui est des prestations d'invalidité est en général médiocre. (166)

C33. La définition des personnes qui ont droit aux prestations d'invalidité comporte des lacunes. (167)

C34. La clause d'exemption de retour au travail dans les 30 jours qui est contenue à la section B de la police d'assurance-automobile est inadéquate. Elle n'encourage pas à retourner au travail. (169-170)

C35. Il n'existe pas vraiment de bonnes mesures disciplinaires internes ou externes qui encourageraient les assureurs à verser les prestations d'invalidité aux assurés qui y ont droit, sans délai indu. (170)

C36. Les prestations funéraires sont trop basses. (172)

C37. On ne devrait pas limiter l'assurance sans égard à la responsabilité en y intégrant des exemptions qui ont trait au comportement des automobilistes; cependant, le suicide et la tentative de suicide constituent des exemptions justifiables, car ils dénotent un comportement intentionnel. (173)

C38. Les frais de réparation en Ontario soutiennent bien la comparaison avec ceux d'autres provinces. (175)

C39. Lorsque des pièces de remplacement sont disponibles, la concurrence entre les pièces des fabricants d'automobiles et les pièces de remplacement a réduit les prix de 25 à 40 %, selon le genre de réparation. (177-178)

C40. La protection contre les automobilistes non assurés ou non identifiés ne doit pas figurer à la section B de la police. (181)

R20. On devrait maintenir le minimum de 200 000 $ pour la responsabilité civile. Ceux qui le désirent peuvent obtenir une protection additionnelle en achetant une assurance responsabilité civile supplémentaire ou une assurance SEF 44 contre les sous-assurés, ou les deux. (143)

R21. On devrait examiner la structure du contrat de subrogation en bloc de l'O.H.I.P. pour s'assurer que l'on verse les frais auxquels il a droit par suite d'accidents d'automobiles. (150)

R22. On devrait modifier la Loi sur les assurances pour exiger que toutes les compagnies d'assurance-automobile inscrites adhèrent au contrat de subrogation en bloc de l'O.H.I.P. de 1978. (151)

R23. On devrait envisager d'élargir le concept du contrat de subrogation en bloc de l'O.H.I.P. de 1978 de manière à inclure d'autres sinistres (par exemple, la négligence médicale), lorsque la subrogation de l'O.H.I.P. se fait de façon individuelle. (151)

R24. Lorsque les coûts futurs des soins de santé sont établis au procès ou par règlement, les intérêts de l'O.H.I.P., le cas échéant, devraient être identifiés *par le juge du procès ou la documentation relative au règlement. La valeur actuelle des coûts futurs des soins de santé de l'O.H.I.P. devrait être versée à l'O.H.I.P. (151-152)*

R25. *On devrait entreprendre une étude en vue de déterminer si la protection contre les sous-assurés et contre les non-identifiés et non-assurés devrait être incluse dans le contrat de l'O.H.I.P., pour qu'il n'y ait plus de subrogation individuelle dans les cas où cette protection s'applique. (152)*

R26. *Un assuré et un assureur qui concluent une entente, par laquelle la police émise est une police de façade ou par laquelle un avenant ou un autre contrat a pour effet de faire de l'assuré un auto-assureur, devraient signaler l'existence d'un tel accord ainsi que ses conditions au Surintendant des assurances. L'assureur et l'assuré devraient être tenus de verser ensemble le montant que l'O.H.I.P. aurait normalement reçu, si le contrat spécial n'avait pas été conclu. Lorsque l'O.H.I.P., l'assureur et l'assuré ne peuvent pas s'entendre, le Surintendant des assurances devrait avoir le pouvoir, après avoir consulté les groupes concernés, d'établir une prime, s'il est possible de le faire, de manière à pouvoir appliquer le facteur de pourcentage de subrogation en bloc de l'O.H.I.P. Sinon, l'O.H.I.P. devrait avoir le droit de subrogation sur une base individuelle dans les cas où l'assuré est un auto-assureur. (153)*

R27. *Des contrôles plus rigides devraient être imposés pour faire en sorte que les cas qui relèvent du système* *d'indemnisation des accidents du travail ne sont pas traités par l'O.H.I.P. (153-154)*

R28. Tous les autres ministères gouvernementaux qui engagent des fonds pour les victimes d'accidents devraient être tenus de déterminer et d'enregistrer la cause de l'accident. (154)

R29. Les chiropraticiens devraient être autorisés à fournir le certificat d'invalidité aux fins du versement des prestations d'invalidité. (169)

R30. La définition de conjoint aux fins des prestations de décès sans égard à la responsabilité devrait être la même que celle qui figure dans la Loi de 1986 sur le droit de la famille. (172)

R31. On devrait encourager l'expansion des centres d'estimation. (176)

R32. Toutes les compagnies d'assurance devraient être tenues d'établir des lignes directrices en matière de qualité et de service pour l'utilisation des pièces de remplacement. Les pièces devraient être de la qualité de l'équipement original et cette qualité devrait être garantie à la fois par le fournisseur et l'assureur. Les consommateurs devraient être informés du nom du fabricant de la pièce qui est utilisée pour la réparation. Des pénalités sévères devraient être prévues pour l'importation ou la vente de pièces qui sont de qualité médiocre, des contrefaçons ou des imitations. (179)

La police d'assurance-automobile

C41. De façon générale, la police standard d'assurance-automobile est mal structurée et difficile à comprendre. (134-135)

R33. On devrait constituer un comité pour réviser la police standard d'assurance-automobile. Cette révision ne devrait pas être laissée uniquement à des avocats ou des comités de l'industrie de l'assurance. (184-185)

R34. Les définitions et clauses générales devraient s'appliquer à toute la police sans exception. Les définitions et clauses qui concernent uniquement certaines parties de la police devraient être placées dans la partie pertinente de la police. (185)

R35. Les exclusions qui se rapportent à chaque partie de la police devraient figurer dans cette partie, de sorte qu'on comprenne bien ce qui exclu de l'assurance. (186)

R36. La police devrait être structurée de la façon suivante : (186)
Partie 1 : Responsabilité civile

Partie 2 : Prestations sans égard à la responsabilité

(i) frais médicaux et réadaptation
(ii) invalidité
(iii) décès et obsèques
(iv) autres prestations

Partie 3 : Dommages au véhicule :

- *(i) collision*
- *(ii) formule générale*
- *(iii) risques spécifiés*
- *(iv) tous risques*

Partie 4 : Protection contre les automobilistes non assurés/non identifiés

Partie 5 : Prestations supplémentaires pour les accidents survenus au Québec

Partie 6 : Dispositions légales, clauses générales et définitions

- *(i) Dispositions légales*
- *(ii) Clauses générales et définitions*

Partie 7 : Avenants, y compris SEF 44.

C. PRINCIPES DE L'ASSURANCE, CLASSIFICATION ET SOUSCRIPTION (Chapitre 6)

C42. Les primes payées par l'assuré devraient raisonnablement refléter le risque que l'assuré impose au système. Le regroupement des risques qui présentent des caractéristiques semblables aux fins de l'établissement des primes constitue un principe fondamental de tout régime privé d'assurance volontaire. La classification des risques est essentielle à l'assurance. (189-190)

C43. L'approche "valide jusqu'à preuve du contraire" pour l'établissement des primes est fondamentalement déficiente. Des décisions de jugement en matière de tarification doivent être prises avant et non après l'accident. (194)

C44. L'interfinancement d'un groupe particulier par d'autres au sein du système va à l'encontre de la dynamique concurrentielle du secteur privé de l'assurance. (196)

C45. Le système de classification doit être évalué en fonction d'un certain nombre de critères d'efficacité et d'équité, entre autres : l'homogénéité, la séparation, la fiabilité, l'acceptabilité et la valeur d'incitation. (197-199)

C46. Les jeunes automobilistes (moins de 25 ans) sont mêlés à un nombre proportionnellement plus grand d'accidents et à des accidents plus graves que les autres automobilistes. (202)

C47. Les hommes de moins de 25 ans sont mêlés à des accidents plus fréquents et plus graves que les jeunes femmes. (207-209)

C48. Le fait de remplacer l'âge par le nombre d'années de détention d'un permis de conduire est un principe imparfait de tarification car :

(i) étant donné l'âge probable des membres d'un groupe de classification, établi en fonction du nombre d'années de détention d'un permis de conduire, le remplacement de l'âge par le nombre d'années de détention d'un permis de conduire n'éliminera pas vraiment l'âge comme critère de tarification;

(ii) le nombre d'années de détention d'un permis de conduire ne tient pas compte des données qui démontrent constamment que les jeunes automobilistes qui viennent d'obtenir un permis posent un risque plus grand que les automobilistes plus âgés qui viennent d'obtenir un permis;

(iii) on tiendra compte de l'âge (et du sexe) au niveau de la souscription. (212-213)

C49. Contrairement à l'âge, le sexe ne constitue pas en lui-même un facteur de prédiction; cependant, le fait d'éliminer le sexe comme facteur de tarification et d'y substituer le nombre de kilomètres de conduite va exposer le système à des frais accrus de vérification, qui seront transmis au consommateur sous la forme de primes plus élevées; il y a également la question de la fiabilité du remplacement. (213)

C50. Il est probable que le fait d'éliminer le sexe comme facteur de tarification va faire monter les primes pour les jeunes femmes. (214)

C51. La valeur de prédiction de l'état matrimonial comme facteur de tarification est douteuse et, de toute façon, elle est devenue un facteur de tarification inacceptable sur le plan social. (203)

C52. L'introduction d'un système bonus-malus n'est ni pratique ni conforme aux principes fondamentaux de l'assurance. Le fait d'exiger des primes uniformes pour des risques inégaux contrevient aux principes de base de l'assurance et donne lieu à l'interfinancement. Le dossier de l'assuré en matière d'accidents et de condamnations peut entrer en jeu dans l'établissement des primes mais il ne peut pas être utilisé seul; il doit faire partie d'un système de classification valide qui est conforme aux principes fondamentaux de l'assurance. (220)

C53. Pour pouvoir être le moindrement efficace, un système de classification bonus-malus exige un échange complet de données entre les assureurs. (223)

C54. Un système bonus-malus peut donner lieu à des injustices car des points malus sont imposés si la police donne lieu à des sinistres, quelle que soit l'identité du conducteur de l'automobile assurée au moment de l'accident. (223-224)

C55. Les abus en matière de souscription qui se sont produits au cours de 1986 et de 1987 continuent, dans une certaine mesure, d'exister dans l'industrie de l'assurance-automobile de l'Ontario. (237)

C56. Les motocyclettes posent un problème en ce qui concerne l'assurance sans égard à la responsabilité. Comme les motocyclistes sont relativement mal protégés, ils subissent généralement des blessures plus graves que les victimes d'accidents d'automobiles; de plus, les propriétaires et conducteurs de motocyclettes ont tendance à être des jeunes. (237-238)

C57. Les taxis présentent un problème particulier en ce qui concerne les primes; ce problème est attribuable au coût élevé des sinistres. Même avec le niveau élevé actuel des primes, les automobilistes de l'Ontario subventionnent les taxis et les exploitants de taxis de l'extérieur de l'Ontario subventionnent les exploitants de taxis de Toronto. (239-240)

R37. L'industrie de l'assurance-automobile ne devrait plus se servir de l'état matrimonial comme facteur de tarification. (203)

R38. La classification proposée qui élimine l'âge, le sexe et l'état matrimonial comme facteurs de tarification devrait être examinée et évaluée à l'extérieur des paramètres du comité qui a été établi pour la créer. L'impact du système sur les primes que devront payer les consommateurs devrait être divulgué et examiné. (217)

R39. Le recours au nombre d'assureurs qu'un demandeur d'assurance a eu au cours d'une période donnée comme critère de souscription devrait être interdit et considéré comme une pratique de souscription injuste. (230)

R40. Les conducteurs occasionnels désignés devraient être exclus de l'assurance-automobile dans les cas où l'assuré désigné et le conducteur occasionnel ont reconnu par écrit qu'une assurance n'est pas demandée et ne devrait pas être étendue au conducteur occasionnel désigné. (231)

R41. *On devrait créer une nouvelle infraction pour pouvoir pénaliser l'assuré désigné lorsque ce dernier a donné son consentement à l'utilisation du véhicule assuré par le conducteur occasionnel exclu. (232)*

R42. *On devrait établir une nouvelle infraction, moins grave que le vol et en sus de la conduite sans assurance, pour pénaliser un conducteur occasionnel exclu qui a conduit la voiture de l'assuré avec ou sans son consentement. (232)*

R43. *On devrait suivre de près les résultats techniques de l'Association des assureurs; on devrait prendre des mesures pour essayer d'établir une distinction entre les conducteurs qui présentent des risques honnêtes et qui n'ont pas leur place avec l'Association des assureurs, et ceux qui présentent des risques, honnêtes ou non, que le marché ordinaire ne peut pas raisonnablement souscrire. (234-235) Voir également R141.*

R44. *La tarification de base pour les véhicules tout-terrain à trois roues, les véhicules tout-terrain à quatre roues et d'autres véhicules du même genre, comme les motoneiges, devrait être examinée dans le cadre de la structuration du nouveau système de classification. (239)*

R45. *Les recommandations formulées dans le rapport de 1987 de la Metropolitan Licensing Commission concernant l'industrie du taxi devraient être acceptées dans l'ensemble. (241)*

R46. *Il devrait y avoir de meilleurs programmes d'éducation et de contrôle des conducteurs, peut-être au moyen d'incitations, pour les chauffeurs de taxi. (241)*

D. COÛTS DES SINISTRES ET PRIMES (Chapitre 7)

Coûts des sinistres

C58. Les coûts des sinistres par véhicule pour les dommages matériels sont demeurés relativement stables. (248)

C59. Depuis 1982, les coûts des sinistres pour les dommages corporels n'ont cessé d'augmenter. (248)

C60. La partie de la responsabilité civile qui a trait aux dommages matériels est demeurée relativement stable. Les coûts des sinistres pour l'assurance individuelle ont augmenté mais restent sous contrôle. Les sinistres pour dommages corporels constituent le principal problème dans ce secteur. (250)

C61. Les dommages non pécuniaires représentent l'élément le plus important des dommages, quelle que soit l'importance de la demande d'indemnité. Plus l'importance de l'indemnité augmente, plus l'importance des dommages pécuniaires diminue. Les dommages non pécuniaires représentent environ 70 % du règlement des sinistres pour les demandes moins importantes et environ 25 % pour les demandes de plus de 75 000 $. (262)

C62. Les dépens partie-partie qui sont versés aux avocats pour des victimes d'accidents d'automobiles représentent 11 % des demandes d'indemnité. L'intérêt antérieur au jugement représente 10 % des demandes d'indemnité et les demandes au titre de la Loi sur le droit de la famille, environ 5 %. (262-263)

C63. L'augmentation des coûts des sinistres pour dommages corporels s'explique par un certain nombre de raisons :

(i) les pertes économiques augmentent en période de prospérité économique; (269)

(ii) la prospérité économique fait accroître la conduite automobile; plus la densité de la circulation augmente, plus la fréquence des accidents augmente; (269)

(iii) depuis 1980, la loi fixe à 2,5 % le taux d'actualisation; en 1978, un taux de 7 % était couramment utilisé; (270)

(iv) les décisions de 1978 de la Cour suprême du Canada dans l'affaire Trilogy ont amené les juges et jurés de première instance à répartir l'évaluation des dommages-intérêts en composantes raisonnables; cette répartition a donné un calcul plus élevé des pertes économiques; (270)

(v) les victimes d'accidents font de plus en plus appel à des avocats pour défendre leurs intérêts; dans l'ensemble, l'intervention des avocats fait augmenter la valeur du règlement; (270)

(vi) les avocats font de plus en plus preuve d'invention pour établir la preuve des pertes économiques, ce qui fait augmenter les évaluations des dommages-intérêts; (271)

(vii) les experts sont de plus en plus en mesure de fournir des preuves de manière convaincante dans les tribunaux de première instance et, dans l'ensemble, il en est résulté une augmentation des dommages; (271)

(viii) dans les cas où les coûts futurs des soins de santé sont importants ou dans les cas d'accidents fatals, la majoration augmente sensiblement les coûts des sinistres; (272)

(ix) par suite des progrès réalisés au niveau des soins de santé, des personnes gravement blessées ont survécu à grands frais sur une période relativement longue; (272)

(x) la procédure préparatoire au procès a généralement contribué à accroître la valeur des sinistres; (272)

(xi) les demandes d'indemnité au titre de la *Loi portant réforme du droit de la famille* et de la *Loi sur le droit de la famille* ont fait augmenter les dommages; cependant, on ne peut pas attribuer à la *Loi sur le droit de la famille* certaines augmentations récentes des coûts des sinistres pour dommages corporels; (273)

(xii) l'intérêt antérieur au jugement a eu des répercussions importantes sur les coûts des sinistres pour dommages corporels; (273)

(xiii) même si les assureurs exagèrent la générosité des tribunaux, il ne fait aucun doute que les pertes économiques ont augmenté et que le traitement judiciaire a été plus généreux, en particulier dans le cas des coûts futurs des soins de santé. Il en est résulté une augmentation des coûts relatifs aux dommages corporels. Cependant, depuis quelques années, les juges et jurés de première instance se font plus modérés dans leur traitement de l'indemnisation non pécuniaire, en particulier en ce qui concerne les demandes relatives à la Loi sur le droit de la famille. (274)

Primes

C64. Même si les primes de l'assurance pour la responsabilité civile et les dommages matériels ont augmenté considérablement en 1985 et 1986, le niveau des primes est encore inférieur en 1986 à ce qu'il était en 1977. (277)

C65. Les primes de l'assurance individuelle ont été relativement instables mais les écarts d'une année à l'autre n'ont pas été marqués. En dollars constants, les primes de l'assurance individuelle en 1986 étaient légèrement plus basses qu'en 1976 et à peu près au même niveau qu'en 1981. (277)

C66. En 1986, les primes de l'assurance collision de la section C étaient sensiblement plus basses que le niveau record atteint en 1977 et à peu près les mêmes qu'en 1983. (277)

C67. Les primes de l'assurance-formule générale de la section C ont nettement augmenté depuis 1975. (277)

C68. Les primes de l'assurance tous risques suivent la même tendance que les primes de la responsabilité civile. Même en tenant compte de la forte augmentation de 1985-1986, les primes étaient encore plus basses qu'en 1977, en dollars constants de 1981. (278)

Coûts des sinistres et primes

C69. L'écart entre les coûts et les primes pour les dommages corporels/dommages matériels a été le plus prononcé en 1977, lorsque les primes ont dépassé de beaucoup les coûts, et en 1985, lorsque les coûts ont dépassé de beaucoup les primes. (279)

C70. On devrait actualiser les provisions afin de fournir une évaluation réaliste de la performance d'un assureur. (283)

C71. L'industrie de l'assurance n'a jamais vraiment tenu compte, et en particulier au début des années 1980, de l'impact probable du taux d'intérêt antérieur au jugement et des demandes d'indemnité au titre de la *Loi portant réforme du droit de la famille*. De plus, les assureurs n'ont pas raisonnablement envisager la probabilité que les coûts des demandes augmenteraient nécessairement une fois terminée la récession du début des années 1980 et revenue la prospérité relative. (285)

C72. Compte tenu des tendances des coûts des sinistres pour les dommages corporels, les primes, qui auraient dû être relevées plus tôt et de façon plus graduelle, ont été augmentées en 1985-1986. En 1985-1986, l'augmentation des primes était probablement justifiée mais, en raison de sa mise en oeuvre soudaine, il fallait s'attendre à des plaintes de la part des consommateurs. (283-285)

C73. La partie de la responsabilité civile qui a trait aux dommages matériels ne pose pas vraiment de problème sur le plan des coûts et, par conséquent, sur le plan des primes. (195)

C74. L'assurance individuelle a connu une augmentation des coûts moyens des sinistres; cependant, il n'existe aucun problème en ce qui concerne l'écart entre les coûts et les primes. (295)

C75. Il n'y a pas de problème d'écart entre les coûts et les primes en ce qui concerne la garantie contre les collisions et la garantie accidents sans collision, qui sont facultatives.

C76. La fréquence des dommages corporels s'est stabilisée. (296)

C77. Aussi longtemps que les coûts moyens des sinistres pour les dommages corporels par automobile vont continuer d'augmenter, les primes vont augmenter. (296)

C78. Les augmentations des primes pour les dommages corporels/dommages matériels en 1985-1986 ont permis de maintenir un certain équilibre entre les primes et les coûts. Le système semble faire montre d'une certaine modération au niveau de la responsabilité civile. (296-297)

E. POURSUITES JUDICIAIRES (Chapitre 9)

Actes de procédure

C79. Dans les litiges relatifs à des accidents d'automobiles, les actes de procédure sont inutilement compliqués; les actes de procédure qui particularisent la négligence n'apportent aucun avantage réel. (344)

R47. *Les Règles de procédure civile devraient être modifiées pour éliminer l'exigence voulant que les actes de procédure dans les litiges relatifs à des accidents d'automobiles particularisent les allégations de négligence. (344)*

R48. *Les Règles de procédure civile devraient exiger que la déclaration indique les dommages demandés pour les pertes économiques et les pertes non économiques dans le cas de chaque demandeur, ainsi qu'une déclaration concernant la nature des blessures subies par le demandeur. La défense devrait énoncer brièvement la position du défendeur en ce qui concerne la responsabilité et les dommages. (344-345)*

R49. *Les juges de première instance devraient avoir le pouvoir d'imposer des pénalités aux avocats qui font des allégations non justifiées dans les actes de procédure. (345)*

Mesures préparatoires au procès

R50. *Toutes les actions devraient faire l'objet de mesures préparatoires au procès et ne devraient pas être* *inscrites au rôle tant que le juge de première instance ou, en son absence, un autre juge de la cour n'a pas certifié qu'elles sont prêtes pour un procès. (346)*

R51. *Dans le cas d'un accident d'automobile où des dommages constituent le point en litige, la documentation préparatoire au procès devrait comprendre les pièces suivantes :*

a) tous les rapports médicaux d'un médecin dont la preuve sera soumise au procès sous la forme d'un témoignage de vive voix ou par le dépôt d'un rapport médical;
b) les rapports de tous les autres experts sur lesquels on se fiera; et
c) un énoncé de la position de chaque partie en ce qui concerne tous les aspects des pertes économiques. (346)

R52. *Dans la mesure du possible, les parties devraient assister à la conférence préparatoire au procès, sauf si le défendeur est assuré et que les limites de la police ne sont pas une question pertinente. (346)*

R53. *Les actions ne devraient pas être inscrites pour instruction tant que les avocats qui entament l'action n'ont pas expressément certifié que les interrogatoires préalables sont terminés et que l'action est prête pour le procès. Il incombe à l'avocat de prendre les dispositions nécessaires pour la conférence préparatoire au procès. (266)*

R54. *Tous les bureaux de la Cour provinciale (Division civile) devraient assigner des avocats de service à ceux qui ont besoin d'une aide avant le procès. L'avocat de service devrait s'assurer avant le procès que les demandeurs, en particulier, ont déposé des offres de règlement et que la preuve exigée (comme les rapports médicaux) est disponible. À la Cour provinciale (Division civile), la preuve médicale devrait prendre la forme d'un rapport, sauf si un médecin a obtenu la permission de donner un témoignage de vive voix. (356-357)*

R55. *On devrait élargir les procédures de collecte des données du ministère du Procureur général de manière à pouvoir saisir les données ayant trait au nombre de conférences préparatoires à des procès et au temps qu'on y consacre, pour les mêmes classes de causes (y compris celles qui ont trait aux véhicules automobiles) pour lesquelles on inscrit actuellement des données (366-367)*

Rapports des médecins et des autres experts

C80. En ce qui concerne la production et la divulgation des rapports des médecins et des autres experts, les principaux objectifs consistent à favoriser des procès justes, des règlements rapides et la réduction des coûts des litiges. (351)

R56. *On devrait modifier l'article 52 de la Loi sur la preuve de l'Ontario de manière à assujettir à ses dispositions les rapports de tous les professionnels* de la santé, y compris les dentistes, les chiropraticiens, les psychologues, les physiothérapeutes et les réadaptateurs. (351)

R57. On devrait modifier l'article 52 de la Loi sur la preuve pour exiger que toutes les parties qui ont l'intention d'appeler à témoigner un médecin ou un autre professionnel de la santé soient tenues de produire tous les rapports de ce témoin. (353)

R58. On devrait modifier le paragraphe 52(2) de la Loi sur la preuve pour exiger expressément qu'une partie qui a l'intention de déposer un rapport médical le fournisse à l'autre partie. (353)

R59. On devrait modifier le paragraphe 52(3) de la Loi sur la preuve pour exiger que les médecins qui ont examiné une partie et les médecins qui interviennent uniquement à titre de consultants soient assujettis aux mêmes règles en ce qui concerne les rapports médicaux et le droit du médecin de donner un témoignage de vive voix au procès. (353)

R60. On devrait utiliser davantage la Règle 53.02(1). (352)

R61. On devrait modifier la Règle 50.05 des Règles de procédure civile pour exiger que les rapports médicaux et les rapports des autres experts soient produits pour le juge de la conférence préparatoire et les autres parties, sept jours avant la conférence préparatoire. (352)

R62. *Le juge du procès devrait avoir le pouvoir de permettre le dépôt du rapport d'un expert comme pièce dans les procès avec jury et sans jury, même si l'expert sera appelé à donner un témoignage de vive voix au procès.*

Offres de règlement

R63. *On devrait modifier les Règles de procédure civile pour exiger qu'un demandeur présente une offre de règlement dans les sept à dix jours qui suivent une conférence préparatoire au procès. (360)*

R64. *On devrait modifier la Règle 57.01(1) des Règles de procédure civile pour ajouter, comme facteur pouvant être pris en considération en ce qui concerne les frais, le défaut d'une partie obtenant gain de cause de présenter une offre de règlement. (360)*

Procès

C81. La recommandation de la Commission d'enquête sur les tribunaux de l'Ontario en ce qui concerne les dépens à la Cour provinciale (Division civile) pourrait entraîner une économie de 3 %. (356)

C82. Les causes relatives à des accidents d'automobiles ne prennent pas une part exagérée du temps des tribunaux car la vaste majorité des causes se terminent par un règlement et non par un procès. (383)

C83. En particulier, au cours de la période 1982-1985 :

a) La vaste majorité de toutes les demandes d'indemnité relatives à des accidents d'automobiles se sont réglées sans qu'une action soit introduite.

b) Une action a été introduite dans moins de 50 % des demandes relatives à des dommages corporels.

c) Et, même lorsqu'une action a été introduite, plus des deux tiers des demandes se sont réglées avant que l'action soit inscrite au rôle.

d) Entre 2 et 3 % des demandes relatives à des dommages corporels ont fait l'objet d'un procès.

C84. Au cours de la période 1982-1985, le nombre d'actions relatives à des automobiles qui ont été introduites à la Cour suprême de l'Ontario a diminué; le nombre d'actions relatives à des véhicules automobiles qui ont été introduites à la Cour suprême et qui ont été inscrites au rôle pour un procès avec ou sans jury est demeuré plus ou moins stable au cours de cette période.

C85. Il y a eu une nette augmentation du nombre de procès avec jury relativement à des véhicules automobiles, tant à la Cour suprême que dans les cours de district. L'augmentation des convocations de jury est particulièrement prononcée à Toronto dans les deux tribunaux et, en particulier, en ce qui concerne les causes relatives à des véhicules automobiles à la Cour suprême.

C86. La plupart des convocations de jury sont signifiées par des défendeurs. (375)

C87. Il y a eu une réduction significative du pourcentage des procès sans jury relativement à des véhicules automobiles à la Cour suprême; cette réduction est probablement attribuable à l'influence croissante des conférences préparatoires pour favoriser des règlements. (375)

C88. À la Cour de district, le pourcentage des actions sans jury relatives à des véhicules automobiles qui ont donné lieu à un procès est plus élevé que celui des actions avec jury. (376)

C89. À la Cour suprême, il y a eu une augmentation sensible du pourcentage des causes relatives à des véhicules automobiles qui ont été réglées avant le procès au cours de la période 1985-1986, comparativement à la période 1979-1980. (376)

C90. À la Cour de district, il y a eu une augmentation sensible du nombre de causes sans jury relatives à des véhicules automobiles qui ont été réglées avant le procès au cours de la période 1985-1986, comparativement à la période 1979-1980. (376)

R65. On devrait modifier les Règles de procédure civile de manière à établir deux listes distinctes :

(i) une liste des causes inscrites au rôle pour une conférence préparatoire au procès; et
(ii) une liste des causes qui sont prêtes pour le procès. (366)

R66. *La liste des causes qui sont prêtes pour la conférence préparatoire devrait comprendre les causes pour lesquelles l'avocat a certifié que les interrogatoires préalables ont été tenus et que la cause est prête pour la conférence préparatoire. (366)*

R67. *Les causes prêtes pour le procès devraient comprendre les causes pour lesquelles le juge de la conférence préparatoire a certifié qu'elles étaient prêtes pour le procès. (366)*

R68. *On devrait modifier la Loi sur les tribunaux judiciaires pour permettre aux juges, dans les causes avec jury, de formuler une opinion à l'intention des membres du jury en ce qui concerne l'indemnisation possible pour des dommages pécuniaires et non pécuniaires. (354)*

R69. *Les juges devraient songer davantage à rendre des ordonnances sous la forme de directives à l'intention du liquidateur des dépens en ce qui concerne les débours pour les experts dans les litiges relatifs à des accidents d'automobiles. (359)*

R70. *Le ministère du Procureur général devrait examiner le coût des actions civiles avec jury et envisager la possibilité d'augmenter les frais à payer pour inscrire une action pour un procès avec jury. (376-377)*

F. QUESTIONS RELATIVES À L'INDEMNISATION (Chapitre 10)

Demandes relatives au droit de la famille

C91. D'après les statistiques, les coûts des demandes relatives au droit de la famille ne sont pas excessifs et les prétentions voulant que de nombreux parents présentent des demandes d'indemnité frivoles pour obtenir des services de conseils, de soins et de compagnie ne sont pas largement répandues. (390)

C92. Certaines modifications récentes de la procédure ainsi que des décisions de la Cour d'appel de l'Ontario vont réduire à la fois le nombre de demandeurs d'indemnité au titre du droit de la famille et le nombre d'adjudications pour la perte de conseils, de soins et de compagnie. Par conséquent, on ne peut pas justifier les modifications à la Loi sur le droit de la famille en fonction des coûts. (390-392)

C93. Les principes qui sous-tendent l'adjudication ou l'indemnisation au titre des conseils, des soins et de la compagnie, et qui sont énoncés dans la Loi sur le droit de la famille, sont préférables dans l'ensemble à ceux qui sous-tendent la recommandation récente de la Commission de réforme du droit de l'Ontario. (394-395)

R71. On ne devrait pas modifier l'alinéa 61(2)e) de la Loi de 1986 sur le droit de la famille, qui prévoit une indemnisation au titre de la perte de conseils, de soins et de compagnie. En particulier, on ne devrait *pas mettre en oeuvre la recommandation de la Commission de réforme du droit de l'Ontario, selon laquelle les demandes présentées par des personnes à charge pour la perte de conseils, de soins et de compagnie devraient être abolies. (393-394)*

Intérêt antérieur au jugement

C94. L'indemnisation de la victime devrait être l'objet premier de l'intérêt antérieur au procès. Le taux d'intérêt devrait être neutre. (400)

C95. Lorqu'on adjuge le plein taux d'intérêt antérieur au jugement pour la partie d'une adjudication qui a trait aux dommages non pécuniaires, le demandeur est surindemnisé. (407)

R72. On devrait modifier la Loi sur les tribunaux judiciaires pour prévoir que, dans le cas des dommages-intérêts conventionnels et non conventionnels, l'intérêt antérieur au jugement sur les montants adjugés pour blessures corporelles devrait être calculé à partir de la date à laquelle est née la cause d'action. (401)

R73. L'intérêt antérieur au jugement qui est payable dans les cas où il s'agit de la protection contre les sous-assurés SEF 44 devrait être calculé à partir de la date de la perte et non de la date de l'avis. (401)

R74. *On devrait modifier l'article 138 de la Loi sur les tribunaux judiciaires pour permettre l'adjudication d'un intérêt composé calculé à des intervalles de trois mois. (402)*

R75. *On devrait modifier l'alinéa 137(1)d) de la Loi sur les tribunaux judiciaires pour préciser que le taux d'intérêt antérieur au jugement est le taux d'escompte. L'alinéa 137(1)d) devrait également prévoir que le taux d'intérêt antérieur au jugement doit être rajusté tous les trimestres et qu'un taux fractionnaire doit être arrondi au dixième de point inférieur ou supérieur. (402-403)*

R76. *On devrait modifier l'article 138 de la Loi sur les tribunaux judiciaires pour prévoir que l'intérêt antérieur au jugement sur les dommages non pécuniaires est le taux de rendement réel. Si on utilise un taux spécifique, il devrait être de l'ordre de 3,5 à 4 %, avec possibilité d'une révision périodique par le Comité des règles. (410)*

Taux d'actualisation

R77. *On devrait instaurer un mécanisme pour revoir de temps à autre le taux d'actualisation prévu à la Règle 53.09 des Règles de procédure civile. (413)*

Majoration et règlements échelonnés

C96. Un règlement échelonné offre certains avantages évidents par rapport à un paiement en une seule fois qui doit être investi à un taux d'intérêt donné. Les avantages sont particulièrement évidents pour les coûts des soins futurs dans les cas de blessures et pour les pertes pécuniaires dans les cas d'accidents fatals. (422-424)

R78. *On devrait modifier l'article 129 de la Loi sur les tribunaux judiciaires pour prévoir, à la discrétion du juge, des règlements échelonnés obligatoires pour les coûts des soins futurs dans les cas de blessures et pour les pertes pécuniaires dans les cas d'accidents fatals (424)*

R79. *Lorsque le juge décide d'imposer un règlement échelonné, on devrait laisser aux parties une période de temps raisonnable mais assez courte (par exemple, 14 jours) pour consulter des experts en règlements échelonnés ou en assurance-vie, et présenter ensuite au juge des observations sur la forme du règlement échelonné. (425)*

R80. *Dans la mesure où le calcul de la majoration est encore requis dans les procès avec jury, ce calcul devrait être effectué par le juge du procès (plutôt que par le jury), après que le jury a formulé, en ce qui concerne l'indemnisation, des conclusions de fait qui pourraient nécessiter une majoration. (425)*

R81. *Si le calcul d'une majoration est encore nécessaire, un sous-comité du Comité des règles devrait être constitué en vue d'élaborer une méthode uniforme pour le calcul de la majoration à utiliser dans toutes les causes pertinentes. (425-426)*

Règle des sources secondaires de revenu

C97. D'après les résultats de notre enquête sur les demandes d'indemnité, les victimes d'accidents d'automobiles qui disposent de sources secondaires de revenu reçoivent 56 % de plus que ce que la loi leur donne au titre de la perte de revenu. Il en résulte une surindemnisation globale de 17 % pour toutes les victimes d'accidents d'automobiles. (433)

C98. On peut raisonnablement conclure que l'abolition de la règle des sources secondaires de revenu aurait des effets incertains mais démontrables pour réduire la fréquence des demandes d'indemnité.

C99. La règle des sources secondaires de revenu, telle qu'elle est actuellement appliquée en Ontario, constitue du gaspillage dans la pratique et ne peut pas être justifiée en principe. (438)

C100. On ne peut pas justifier le maintien de la règle des sources secondaires de revenu pour des motifs de dissuasion.

C101. Bon nombre de sources secondaires de paiements n'exercent pas de droit de subrogation. (439)

C102. Pour des raisons de coûts et de relations publiques, il est peu probable que les droits de subrogation seront exercés; il n'est donc pas approprié de mettre au point un modèle fondé sur la subrogation pour éliminer la surindemnisation occasionnée par la règle des sources secondaires de revenu. (439)

R82. *Le gouvernement de l'Ontario devrait adopter des mesures législatives :*

a) pour que la règle des sources secondaires de revenu soit abolie;

b) pour que, si une personne blessée reçoit des prestations secondaires sous forme de paiements de sources publiques ou privées, ces paiements (assujettis à l'impôt sur le revenu, s'il y a lieu) soient déduits des éléments pertinents du montant adjugé à la personne blessée, de manière à éviter toute surindemnisation. (442-443)

R83. *Les paiements imposables de sources secondaires de revenu devraient être déduits nets d'impôt. Un facteur d'imposition fixe de 20 % devrait être appliqué pour réduire la compensation des sources secondaires de revenu. (443-444)*

R84. *La perte de revenus futurs devrait être établie et versée sans la compensation des sources secondaires de revenu, mais le demandeur devrait être tenu de garder les paiements futurs de sources secondaires de revenu en fiducie pour le tiers assureur, nets d'impôt s'il y a lieu. (444)*

R85. *Le gouvernement de l'Ontario et le gouvernement du Canada devraient procéder à un examen de leurs programmes respectifs de supplément du revenu en cas d'accidents afin de déterminer*

a) le montant versé aux personnes blessées par suite d'un accident d'automobile; et *b) la mesure dans laquelle les droits de subrogation en ce qui concerne ces paiement sont exercés ou sont possibles. (443)*

G. SYSTÈME D'INDEMNISATION RECOMMANDÉ (Chapitre 12)

C103. Étant donné que l'assurance-automobile est obligatoire, elle doit être offerte à un prix conforme aux principes reconnus de l'assurance. (513)

C104. Les autres systèmes d'indemnisation devraient être évalués en fonction des critères raisonnables qui suivent : indemnisation, réadaptation, rentabilité, incitation/dissuasion, équité, considérations relatives à l'assurance, constitutionnalité. (515-517)

C105. Un régime d'indemnisation complet pour les victimes d'accidents ou les invalides ne constitue pas une solution rentable mais l'élaboration d'un système d'indemnisation pour les accidents d'automobiles devrait tenir compte de la possibilité de mettre au point éventuellement un régime d'indemnisation complet. (517)

C106. Du point de vue du critère de l'indemnisation, l'assurance sans égard à la responsabilité et l'assurance sans égard à la responsabilté avec seuil sont supérieures au système de responsabilité civile. (519)

C107. La réadaptation constitue un objectif essentiel de tout système d'indemnisation et on ne peut pas espérer la réaliser avec le système de responsabilité civile. Étant donné que l'indemnisation sans égard à la responsabilité est fournie aux premières parties et que des indemnités de réadaptation doivent être offertes sans délai indu, le critère de la réadaptation est mieux servi par l'assurance sans égard à la responsabilité que par le système de responsabilité civile. (520-521)

C108. Avec un régime d'assurance sans égard à la responsabilité, il est possible de réduire les coûts des transactions. Cette réduction devrait être de l'ordre de 5 % des primes acquises. Dans ce sens, l'assurance sans égard à la responsabilité est plus rentable que le système actuel d'indemnisation des tiers. Il est douteux qu'on obtienne une réduction significative des coûts des transactions avec l'assurance sans égard à la responsabilité avec seuil. Cette assurance n'offre donc aucun avantage sur le plan de la rentabilité. (528)

C109. Avec un système d'assurance sans égard à la responsabilité, si on n'augmente pas les primes, la seule façon d'accroître les indemnités versées aux premières parties est de réduire ou d'éliminer systématiquement les droits existants à une indemnisation non pécuniaire. (530)

C110. Le système de responsabilité civile continue d'exercer un certain effet de dissuasion dans le contexte des véhicules automobiles, même si son impact ne peut pas être mesuré de façon empirique. (540)

C111. Même si le concept de la responsabilité n'exerce aucun effet positif de dissuasion, l'introduction d'un régime d'indemnisation sans égard à la responsabilité pourrait avoir certains effets négatifs sur le comportement des conducteurs. (542)

C112. L'introduction de l'assurance sans égard à la responsabilité au Québec a eu un effet non quantifiable sur le taux des accidents d'automobiles au Québec mais cet effet a été faible comparativement à l'impact de l'assurance obligatoire et de la tarification fixe. (538)

C113. On ne devrait pas ignorer les possibilités du système de responsabilité civile sur le plan de l'équité et de la justice. La neutralité morale de certains accidents d'automobiles ne peut pas résister à une analyse même superficielle. On irait à l'encontre des attentes et du sens de la justice du public en ne permettant pas aux blessés plus graves d'avoir accès à une indemnisation pour les pertes économiques et non économiques, en fonction de chaque cas individuel. Le sens de la justice du public ne sera pas satisfait si la responsabilité est déterminée seulement par le système de justice criminelle et le système de tarification. (545-549)

C114. L'industrie de l'assurance est suffisamment souple pour pouvoir offrir des indemnités avec n'importe quel système raisonnable d'indemnisation. (550)

C115. Le seuil que propose le B.A.C. dans son mémoire ne convient pas.

C116. L'une des lacunes actuelles de l'industrie de l'assurance au niveau des indemnités réside dans le versement des indemnités aux premières parties. Il n'est pas réaliste de conclure que, après l'adoption d'un régime d'indemnisation sans égard à la responsabilité, les activités liées aux demandes d'indemnité entre l'assureur et l'assuré s'amélioreront sensiblement. (561)

C117. L'établissement d'un régime d'assurance-automobile sans égard à la responsabilité comme première étape vers un régime plus complet d'indemnisation sans égard à la responsabilité pourrait rendre moins probable et non plus probable la mise en oeuvre éventuelle d'un régime plus complet d'indemnisation. (564-565)

C118. Les hypothèses de rentabilité qui ont été formulées par le Groupe de travail sur l'assurance de l'Ontario sont erronées. Un système sans égard à la responsabilité dans lequel on vend des polices de façon individuelle ne peut pas remettre aux demandeurs d'indemnité un montant de 80 à 90 cents pour chaque dollar versé en primes. (565)

C119. Un système d'indemnisation pour les accidents d'automobiles devrait traiter humainement toutes les personnes qui sont blessées et fournir des prestations raisonnablement généreuses en matière de réadaptation et de soins à long terme sans égard à la responsabilité, tout en maintenant une distinction entre ceux qui causent des accidents et ceux qui n'en causent pas. (567)

C120. On devrait rejeter l'assurance sans égard à la responsabilité avec seuil car elle est relativement inefficace et inutilement arbitraire. Avec un tel système, les économies au niveau des coûts des transactions seraient minimales ou nulles. (567)

C121. On devrait rejeter le système intégral d'assurance sans égard à la responsabilité pour des motifs de justice et de dissuasion, car bien peu de personnes semblent le vouloir. Un tel système offre manifestement des avantages du point de vue de la rentabilité; cependant, on ne peut pas juger une politique sociale uniquement en fonction des coûts. (568)

C122. Même si on ne peut pas justifier l'utilisation continue du système de responsabilité civile par lui-même pour des motifs d'indemnisation, il ne s'ensuit pas qu'il faille abandonner ce système.

C123. Il n'existe aucune raison valide pour que l'assurance sans égard à la responsabilité et le système de responsabilité civile ne puissent pas coexister. Le maintien de l'indemnisation individuelle avec responsabilité est conforme au sens qu'a le public de ce qui est juste et, dans une certaine mesure, peut avoir un effet de dissuasion. On répond à la critique du système de responsabilité civile pour des motifs d'indemnisation en offrant une indemnisation juste et complète sans égard à la responsabilité. (568-569)

C124. Pour pouvoir légitimer la coexistence de l'assurance sans égard à la responsabilité et le système de responsabilité civile, il faut d'abord une augmentation substantielle du montant des indemnités sans égard à la responsabilité et un élargissement des critères d'admissibilité; deuxièmement, il doit être possible d'offrir le régime d'indemnisation par le biais du système d'assurance-automobile à un coût raisonnable. (569)

C125. On doit augmenter le régime de remplacement du revenu sans égard à la responsabilité afin de fournir une stabilité économique aux victimes d'accidents d'automobiles; cependant, il ne convient pas d'établir des prestations de remplacement du revenu qui soient exagérément élevées, considérant qu'il est obligatoire pour les automobilistes de l'Ontario d'acheter cette assurance. (574)

C126. Les personnes blessées dans des accidents d'automobiles ne devraient pas avoir accès à des indemnités sans égard à la responsabilité qui sont beaucoup plus élevées ou basses que les indemnités offertes à ceux qui sont blessés dans leur lieu de travail. (575)

C127. Une période d'attente de sept jours avant de pouvoir recevoir des indemnités sans égard à la responsabilité permettra d'éliminer l'incitation à ne pas retourner au travail que comporte le système actuel et de réduire les coûts des transactions pour les causes de courte durée.

C128. Les prestations de décès ne devraient pas être reliées au revenu de la personne décédée mais elles devraient plutôt fournir aux survivants une aide financière à court terme raisonnable, en simple reconnaissance de la valeur de la vie. Les prestations de décès devraient être modestes mais non insignifiantes. (580)

C129. Si les changements proposés sont mis en oeuvre, les automobilistes de l'Ontario seront les bénéficiaires d'indemnités sans égard à la responsabilité qui sont sensiblement supérieures, à un coût quelque peu réduit et sans avoir à sacrifier nécessairement le droit à une indemnisation individuelle en vertu du système de responsabilité civile. Les économies totales devraient s'élever à environ 65 millions de dollars. Dans l'ensemble, les changements proposés entraîneront une diminution estimative de 12,52 $ par voiture du coût des sinistres. Cette réduction aura également un effet d'entraînement qui contribuera à faire baisser encore davantage les coûts et les primes. Les diminutions des primes devraient correspondre au moins aux économies réalisées sur le plan des coûts. (585-587)

C130. On devrait envisager le calcul avant impôts de la perte de revenu, en particulier de la perte de revenu antérieur. Si on calculait la perte de revenu antérieur après impôts, les économies de coûts s'élèveraient à environ 6 $ par automobile. Si on calculait la perte de revenu futur après impôts, il y aurait une économie additionnelle d'environ 4 $ par automobile. Si on calculait la perte de tout le revenu après impôts, l'abolition de la règle des sources secondaires de revenu entraînerait une autre économie d'environ 7 $ par automobile. (589)

C131. Les changements proposés vont entraîner, par motocycliste, une augmentation des coûts d'environ 31 $ avec la subrogation et 85 $ sans la subrogation. (590)

C132. Les changements proposés vont entraîner des économies d'environ 24 $ par véhicule utilitaire (camion ordinaire). (593)

C133. Dans toute analyse raisonnable des avantages sur le plan des coûts, les petites causes ne s'en tirent pas très bien avec le système de responsabilité civile. Un système juste avec seuil devrait se concentrer sur les causes qui comportent vraiment des blessures et une invalidité de nature mineure. Au lieu de refuser aux blessés moins graves une indemnité au titre des douleurs et souffrances et du préjudice d'agrément, on devrait limiter ou plafonner les dommages non pécuniaires pour les blessés moins graves. (597-598)

R86. On devrait examiner plus à fond, aux niveaux fédéral et provincial, un régime d'indemnisation complet pour les blessures accidentelles ou même un programme universel en matière d'invalidité. (517-518)

Indemnisation sans égard à la responsabilité

R87. La police standard d'assurance-automobile devrait être élargie de manière à prévoir une assurance sans égard *à la responsabilité, sans exclusions liées à la conduite. (570)*

R88. *On devrait porter les prestations de réadaptation de 25 000 à 500 000 $ par sinistre. Le délai devrait passer de 4 ans à 10 ans, ou même à 20 ans moins l'âge de la victime, selon la période la plus longue. (571)*

R89. *On devrait définir largement et clairement la réadaptation, de manière à supprimer tout doute concernant l'obligation des assureurs de premières parties de financer la réadaptation physique et professionnelle. (571)*

R90. *Les prestations de réadaptation devraient être versées au niveau des premières parties, non en fonction uniquement des dépenses subies, et en laissant le bénéfice du doute au demandeur, aux conseillers médicaux du demandeur et aux conseillers en réadaptation médicale du demandeur. (572)*

R91. *L'indemnité pour les soins à long terme devrait être séparée de la réadaptation et fixée à 500 000 $. La famille de la personne blessée ne devrait pas être exclue de l'indemnisation pour les soins à long terme. Les prestations pour les soins à long terme ne devraient pas être plus élevées que le coût mensuel de la résidence de groupe qui peut raisonnablement répondre aux besoins de l'assuré, en tenant compte de la nature des blessures et de tout autre facteur pertinent. (573)*

R92. *Les prestations d'invalidité pour l'employé devraient être calculées en fonction de 80 % du revenu brut du demandeur et devraient être portées de 140 $ par semaine à un maximum de 450 $ par semaine. Exception faite des prestations d'assurance-chômage, les prestations d'invalidité devraient être non primaires. (574-575)*

R93. *Les prestations d'invalidité pour l'employé ne devraient pas être versées pour les sept premiers jours. (576)*

R94. *Les prestations d'invalidité pour l'employé devraient pouvoir être versées à vie. (576)*

R95. *L'admissibilité aux prestations d'invalidité pour le réputé employé devrait commencer à l'âge de 16 ans et non à l'âge de 18 ans et se terminer à l'âge de 65 ans. Les prestations d'invalidité pour le réputé employé devraient être assujetties à une période d'attente de 60 jours. (577-578)*

R96. *Une fois admissible aux prestations d'invalidité, un assuré réputé employé devrait avoir droit aux mêmes prestations qu'un employé. (578)*

R97. *Un élève devrait recevoir l'indemnisation sans égard à la responsabilité de la façon suivante :*

a) 1 000 $ par année scolaire perdue, s'il est à l'école primaire;

b) 2 000 $ par année scolaire perdue, s'il est à l'école secondaire;

c) 4 000 $ par année d'éducation perdue, jusqu'à concurrence de trois années, ou, si un semestre est perdu, la part appropriée de 4 000 $ selon le système de semestres de l'établissement, s'il est au collège ou à l'université;

d) 340 $ par semaine à l'âge de 19 ans, s'il est invalide et ne fréquente pas l'école. (579-580)

R98. *Les prestations de décès devraient être portées à 25 000 $, dans le cas du décès du chef de famille ou du conjoint du chef de famille. Une autre somme de 10 000 $ devrait être versée pour chaque personne à charge du chef de famille ou de son conjoint. (581)*

R99. *Les prestations funéraires devraient être portées à 3 000 $. (581)*

R100. *Le montant maximum des prestations pour les soins à domicile devrait être 50 $ par semaine, en fonction des dépenses raisonnables qui sont subies. Il devrait y avoir une période d'attente de sept jours pour ces prestations. Le critère d'invalidité devrait être le même que pour les prestations d'invalidité ordinaires. (582)*

R101. *Il devrait y avoir des prestations de 200 $ par semaine pour le soin des enfants. Un montant supplémentaire de 50 $ par semaine par enfant ou personne à charge devrait être payable, jusqu'à concurrence de 350 $ par semaine. Les prestations devraient être versées pour une période de deux semaines sans que des reçus soient nécessaires et, par la suite, en fonction des dépenses raisonnables et* *prouvées, jusqu'à concurrence du maximum. Aucun membre de la famille ne devrait être exclu. Le critère d'invalidité devrait être le même que pour les prestations d'invalidité ordinaires. (582)*

R102. *Toutes les prestations d'accident autres que les prestations de décès devraient être indexées une fois par année en fonction de l'indice annuel des prix à la consommation, jusqu'à concurrence d'un maximum de deux fois les prestations prévues. (593)*

Questions connexes

R103. *Étant donné que l'augmentation des prestations sans égard à la responsabilité occasionnera un problème relativement grave au niveau des primes pour les motocyclettes, la subrogation pour les motocyclettes devrait être permise. (590)*

R104. *Les formules de demande d'indemnité devraient être les mêmes pour tous les assureurs agréés. Les formules devraient être simplifiées et de couleurs différentes de manière à ne pas confondre une formule avec une autre. (594)*

R105. *Les personnes qui séjournent à l'hôpital pendant plus de sept jours devraient avoir droit aux deux premières semaines de prestations sans rapport médical, sauf si certaines circonstances démontrent clairement et sans équivoque que le paiement n'est pas approprié. (594)*

R106. *Les experts en assurance devraient pouvoir autoriser des prestations d'invalidité d'un montant de 2 000 $. (594)*

R107. *Les demandeurs d'indemnité devraient payer les frais des rapports médicaux pour les prestations d'invalidité au cours des trois premiers mois de l'invalidité et, par la suite, les frais de ces rapports médicaux sommaires devraient être assumés par l'assureur. (594)*

R108. *Les assureurs et les milieux médicaux devraient tenter de s'entendre sur des frais justes acceptables pour les rapports médicaux relatifs à des prestations d'invalidité; sinon, des frais raisonnables devraient être indiqués dans le barème des tarifs de l'O.H.I.P. (594-595)*

R109. *Les formules de la section B devraient être remises immédiatement à l'assuré blessé si celui-ci est à l'hôpital, et postées ou remises à l'assuré si celui-ci n'est pas à l'hôpital. Il incombe à l'assureur de remettre les formules requises. On devrait fournir aux hôpitaux (en particulier, aux salles d'urgence) les formules médicales relatives à l'assurance sans responsabilité et, dans la mesure du possible, les autres formules également. (595)*

R110. *On devrait s'efforcer d'assurer une certaine coordination entre les formules pour l'assurance-automobile sans égard à la responsabilité et les formules des accidents du travail, de* l'assurance-chômage, du régime de pensions du Canada et des assureurs de l'invalidité à long terme. (595)

R111. On devrait modifier la Loi sur les assurances de manière à fournir au médecin ou au chiropraticien de l'assuré les pouvoirs nécessaires pour remplir la formule médicale des prestations d'invalidité et de la remettre à l'assureur de leur patient. (595)

R112. L'assuré devrait avoir accès au calcul des prestations d'invalidité. (596)

R113. La disposition de la police d'assurance-automobile qui prévoit le retour au travail dans les 30 jours devrait être portée à 90 jours. (596)

R114. Les prestations d'invalidité devraient être versées dans les 15 jours qui suivent la réception des formules requises par l'assureur. (596)

R115. Si on désire une forme de régime d'indemnisation sans égard à la responsabilité, on devrait considérer un type modifié de régime avec seuil, dans lequel les dommages non pécuniaires dans les cas moins graves (définis par un seuil verbal modéré) sont plafonnés, de sorte que, dans les cas moins graves qui ne respectent pas le seuil établi, les dommages non pécuniaires seront limités à 3 000 $. (598)

H. AUTRES QUESTIONS RELATIVES À L'ASSURANCE ET AU CONSOMMATEUR (Chapitre 13)

Fonds pour les sinistres "catastrophiques"

R116. *Il n'est pas nécessaire d'établir un fonds pour les sinistres "catastrophiques" en Ontario. (601)*

Renseignements pour les consommateurs

R117. *Les primes typiques ou primes fixées par la Commission devraient être divulguées et expliquées. (602)*

R118. *Les consommateurs devraient avoir accès à des renseignements sur les demandes d'indemnité, notamment :*

a) le droit de l'assuré à des prestations sans égard à la responsabilité et le montant de ces prestations;
b) la marche à suivre pour évaluer les demandes d'indemnité en matière de responsabilité civile;
c) les mécanismes de règlement des différends qui existent;
d) les programmes sociaux qui pourraient intéresser une personne blessée dans un accident d'automobile;
e) le droit du consommateur de contester les frais de justice par le biais du processus de liquidation, dans les cas où l'assuré a retenu les services d'un avocat;
f) les détails concernant tout délai de prescription pertinent. (603)

R119. *La divulgation des renseignements aux consommateurs devrait se faire par le bureau du Surintendant des assurances. Le bureau du Surintendant devrait être élargi [illegible] manière à pouvoir assurer cette fonction. (603)*

Demandes d'indemnité et pratiques de souscription

R120. *Le gouvernement de l'Ontario devrait adopter des mesures législatives en ce qui concerne les pratiques injustes en matière de demandes d'indemnité. Il devrait notamment réglementer les normes suivantes en ce qui concerne les demandes d'indemnité :*

a) on devrait fournir à l'assuré blessé tous les renseignements relatifs à l'assurance sans égard à la responsabilité, dans les 7 jours qui suivent l'accident;

b) les indemnités sans égard à la responsabilité devraient être versées dans les 15 jours qui suivent la réception de la documentation requise par l'assureur;

c) les formules de demandes d'indemnité sans égard à la responsabilité devraient contenir des directives sur le traitement de la demande et indiquer le numéro de téléphone d'un représentant de la compagnie d'assurance;

d) si un assureur est raisonnablement tenu de poursuivre l'examen d'une demande au-delà de la période de 15 jours, il devrait, dans la mesure du possible, en informer l'assuré et lui indiquer la date prévue de la fin de l'examen;

e) si une demande est refusée en raison d'une disposition, condition ou exclusion précise de la *police, l'assureur devrait être tenu de fournir des renseignements précis sur cette disposition, condition ou exclusion;*

f) le paiement des prestations devrait être accompagné d'explications sur ce paiement;

g) les assureurs ne devraient pas avoir le droit de refuser de payer la totalité ou une partie d'une demande d'indemnité lorsqu'il n'y a pas de différend raisonnable sur le droit de l'assuré ou du demandeur;

h) un assureur ne doit pas exiger qu'un assuré ou demandeur signe une quittance s'étendant au-delà de l'objet qui donne lieu au paiement de l'indemnité;

i) si une demande d'indemnité de première partie est refusée en fonction d'un avis médical obtenu par l'assureur, l'assureur devrait avoir un exemplaire du rapport médical. On devrait interdire aux assureurs de refuser des demandes d'indemnité de première partie en fonction de rapports médicaux verbaux;

j) l'assureur qui exige un examen médical de l'assuré devrait continuer le versement des indemnités de première partie en attendant l'achèvement de l'examen médical et la réception d'un rapport médical par l'assureur;

k) les assureurs devraient être tenus de financer un programme raisonnable de réadaptation, s'il existe des preuves médicales crédibles et, dans les cas appropriés, le témoignage d'un expert en réadaptation à l'appui du programme proposé. Si l'assuré refuse d'entreprendre ou de poursuivre la réadaptation qui a été recommandée par son propre conseiller médical ou celui de l'assureur, *l'obligation de l'assureur de payer les prestations d'invalidité devrait être maintenue jusqu'à ce que la question soit réglée par le mécanisme de règlement des différends. (604-607)*

R121. *Le Surintendant des assurances devrait avoir le pouvoir d'adopter des règles pour assurer le traitement rapide, juste et honnête des demandes d'indemnité et des plaintes. (607)*

R122. *Les assureurs devraient être passibles d'amendes raisonnables jusqu'à concurrence de 10 000 $ pour les demandes et les pratiques de souscription inacceptables. Des audiences concernant des accusations relatives à des demandes ou des pratiques de souscription injustes devraient être tenues par le Surintendant des assurances ou la personne qu'il a désignée. Ces audiences devraient être relativement informelles et susceptibles d'appel par le biais d'une révision judiciaire. (607)*

R123. *Un assuré qui n'a pas reçu les prestations de première partie auxquelles il avait droit ou qui les a reçues en retard devrait avoir droit à un taux d'intérêt deux fois supérieur au taux préférentiel. (607)*

R124. *Le Surintendant des assurances devrait avoir le pouvoir de réagir face à des abus démontrés en matière de souscription et d'imposer des amendes appropriées. (608)*

Règlement des différends

R125. *Comme première étape pour régler les différends en matière de prestations, on devrait accepter la proposition du comité de révision du B.A.C. Chaque assureur devrait désigner un représentant qui serait chargé d'examiner les décisions en matière de paiement des prestations sans égard à la responsabilité. La décision du comité de révision lierait l'assureur mais non l'assuré. (609)*

R126. *Si un assuré n'est pas satisfait de la décision du comité de révision, il devrait pouvoir recourir à l'arbitrage ou aux tribunaux au moyen d'une nouvelle audience. (604)*

R127. *Le Barreau et l'industrie de l'assurance devraient, après s'être consultés, établir une liste régionale d'arbitres acceptables afin de régler les différends relatifs aux polices d'assurance-automobile. (609)*

R128. *On devrait examiner sérieusement la possibilité de créer une division de l'arbitrage au sein du système judiciaire. (610)*

Conducteurs non assurés

R129. *On devrait augmenter l'amende pour la conduite sans assurance. Toute personne reconnue coupable d'avoir conduit sans assurance devrait être passible d'une suspension automatique du permis de conduire, en plus d'une amende. Le privilège de conduire ne devrait* *être rétabli que lorsque le contrevenant a déposé une preuve de solvabilité. (612)*

Systèmes d'information

R130. *Le ministère des Transports devrait procéder immédiatement à l'informatisation des dossiers des automobilistes. Toutes les compagnies d'assurance-automobile de l'Ontario qui sont agréées devraient avoir directement accès à ces données, moyennant des frais annuels calculés en fonction de la part de marché. (615)*

R131. *Un réseau d'information de type coopératif devrait être établi entre le Registrateur des véhicules automobiles et les compagnies d'assurance-automobile agréées de l'Ontario afin de permettre la vérification immédiate de l'assurance-automobile. (615-616)*

R132. *Toutes les compagnies d'assurance-automobile agréées de l'Ontario devraient être tenues de participer à un réseau d'information et donc de verser dans la base de données les dossiers d'accidents de leurs assurés; tous les assureurs devraient avoir accès à ces données. (616)*

I. CONSIDÉRATIONS CONSTITUTIONNELLES (Chapitre 14)

C134. En vertu du paragraphe 92(13) de la Loi constitutionnelle de 1867, la province a l'autorité législative de créer, de modifier et d'abroger des causes d'action en matière de responsabilité civile; une province a également l'autorité législative en ce qui concerne l'assurance-automobile et le pouvoir d'adopter un régime d'indemnisation sans égard à la responsabilité. (619)

C135. L'administration d'un régime d'assurance-automobile sans égard à la responsabilité par un organisme administratif plutôt que par les tribunaux ne contrevient pas à l'article 96 de la Loi constitutionnelle. (619)

C136. Le remplacement du droit d'intenter des poursuites en matière de responsabilité civile par un régime d'assurance sans égard à la responsabilité ne contrevient pas à l'article 7 de la Charte canadienne des droits et libertés. (621-623)

C137. Un régime d'assurance-automobile sans égard à la responsabilité ne contrevient pas à l'article 15 de la Charte. (630-631)

C138. Sur le plan constitutionnel, les régimes avec seuil sont plus vulnérables que les régimes d'assurance sans égard à la responsabilité mais un régime raisonnable avec seuil ne contreviendrait pas, dans l'ensemble, à l'article 15 de la Charte. (639)

C139. Même si un régime sans égard à la responsabilité ou un régime avec seuil contreviendrait à l'article 7 ou à l'article 15 de la Charte, il serait justifié en vertu de l'article 1 de la Charte. (640-641)

C140. L'établissement de l'âge de 65 ans comme date limite pour l'admissibilité aux prestations d'invalidité de l'assurance-automobile sans égard à la responsabilité pourrait donner lieu à une contestation en vertu de l'article 15 de la Charte; cependant, il serait probablement justifié en vertu de l'article 1. (642)

C141. On ne contreviendrait pas à l'article 15 de la Charte en établissant une distinction entre les personnes employées activement et les personnes réputées employées, en prévoyant que, dans le cas de ces dernières, l'admissibilité aux prestations d'invalidité cesse à l'âge de 65 ans. (643)

C142. La date de prise d'effet pour les personnes réputées employées (18 ans) contrevient probablement à l'article 15 de la Charte et ne peut pas être justifiée en vertu de l'article 1. (643)

C143. L'utilisation de l'âge comme facteur de tarification est plus susceptible de survivre à une contestation en vertu de la Charte que l'utilisation du sexe. (648)

R133. On devrait examiner davantage dans quelle mesure il est possible de mettre au point des facteurs de classification neutres qui constituent des remplacements adéquats de l'âge ou du sexe. (650)

J. OFFRE DE L'ASSURANCE-AUTOMOBILE PAR LE SECTEUR PUBLIC OU PRIVÉ (Chapitre 15)

C144. Les comparaisons entre les primes des provinces ne sont pas très utiles et peuvent même être trompeuses pour évaluer la rentabilité comparative des systèmes public et privé d'assurance-automobile. (671)

C145. Les systèmes de classification simples qui sont utilisés par les régimes publics entraînent l'interfinancement des conducteurs à risques élevés par les conducteurs à risques faibles. (667)

C146. L'interfinancement ne se produit pas dans le système privé concurrentiel de l'Ontario, sauf en ce qui concerne le marché résiduel (Association des assureurs). (666)

C147. La décision de nationaliser l'industrie de l'assurance-automobile de l'Ontario pourrait avoir les conséquences suivantes :

a) Il y aurait des exigences financières et organisationnelles très sérieuses au niveau de la mise en oeuvre.

b) Certaines personnes qui travaillent actuellement au sein de l'industrie de l'assurance perdraient leur emploi; d'autres devraient déménager pour le conserver.

c) En excluant le secteur privé de la totalité ou d'une bonne partie du marché de l'Ontario, on pourrait limiter la participation de l'industrie au reste du marché canadien de l'assurance-automobile et créer une capacité insuffisante dans le domaine de l'assurance I.A.R.D. (672-674)

C148. Un monopole public n'obtiendrait pas les gains d'efficacité attribuables aux économies d'échelle, comparativement aux principaux assureurs de l'Ontario. (677)

C149. L'assurance-automobile offerte par un monopole public pourrait permettre de réaliser des économies par rapport à une industrie concurrentielle de l'assurance-automobile dans le secteur privé. L'économie la plus importante serait les frais d'acquisition moins élevés (surtout les commissions des courtiers); une économie moins importante résulterait de l'utilisation probable d'un système de classification simplifié ou, dans les cas extrêmes comme au Québec et en Saskatchewan, de l'utilisation d'aucun système de classification. Ces avantages possibles au niveau des coûts dépendent non seulement de la différence entre le système public et le système privé mais de la différence entre un monopole et un système concurrentiel. (683-684)

C150. L'économie maximum qui pourrait être réalisée au plan des coûts par un monopole public s'élève à environ 7 %, soit une réduction de primes d'environ 43 $ par automobile. (687)

C151. Si on adopte un système simplifié de classification ou aucun système, les économies globales auront des répercussions différentes sur les assurés. Les bénéficiaires de la réduction des primes seront les conducteurs à risques élevés de l'Ontario. Par suite du changement du système de classification, plus de 40 % des conducteurs de l'Ontario, qui sont actuellement classifiés comme des conducteurs à risques faibles, subiront une augmentation des primes après l'adoption d'un système public d'assurance-automobile. Si un monopole public devait utiliser un système de classification plus complexe, les économies possibles au niveau des coûts seraient réduites. (687-688)

C152. Les frais de démarrage d'une société publique d'assurance-automobile, l'élimination des avantages de la concurrence et l'augmentation probable du nombre de conducteurs à risques élevés (et, par conséquent, des coûts des sinistres) auront pour effet de réduire et peut-être même d'éliminer complètement les économies possibles par suite de l'adoption de l'assurance-automobile publique. (688-690)

C153. La liberté du choix et les avantages de la concurrence représentent des avantages indéniables du système privé de l'Ontario. (692)

C154. L'interfinancement des conducteurs à risques élevés par les conducteurs à risques faibles, qui est une caractéristique des régimes publics, n'est ni juste ni équitable. (692-693)

C155. La capacité d'intégrer les exigences en matière d'attribution des permis et d'assurance constitue un avantage de l'assurance-automobile publique. (697)

C156. L'intérêt pour la promotion de la sécurité de la circulation sera probablement plus grand au sein d'un système public que d'un système privé. Cependant, l'intérêt du gouvernement pour la sécurité de la circulation et son engagement à l'égard de la prévention des accidents ne devraient pas être reliés au fait qu'il est responsable du système d'assurance-automobile. (699)

C157. Les frais de réparation des automobiles sont moins élevés dans un système privé que dans un système public. (699-700)

C158. Étant donné que les systèmes publics ne paient pas d'impôt sur les bénéfices des sociétés, la perte de recettes fiscales fera augmenter les taxes dans d'autres domaines. Il s'agit là d'un financement indirect. (700)

C159. Il n'y a aucune raison valable pour qu'un assureur public ait une politique d'investissement dans la province; dans le cas d'un assureur public (I.C.B.C.), plus de 70 % des placements se font à l'extérieur de la province. (700-701)

C160. Rien n'indique que les usagers des systèmes publics sont plus ou sont moins satisfaits que les consommateurs de l'Ontario. Ce fait est d'autant plus évident que les consommateurs des systèmes publics font maintenant face à des augmentations importantes des primes. (701)

C161. L'adoption d'un système public d'assurance-automobile ne profiterait pas aux contribuables et conducteurs de l'Ontario. Les faibles économies possibles, en particulier dans le domaine des frais d'acquisition, seraient annulées à court terme par les importants frais de démarrage d'un régime public et seraient complètement érodées à plus long terme par d'autres considérations relatives aux coûts, notamment l'élimination de la possibilité de réduire les primes en raison de la concurrence. (708-709)

C162. Il n'y a pas de raisons irrésistibles sur le plan social ni d'autres justifications non économiques pour appuyer un système public d'assurance-automobile. En fait, une analyse des facteurs non liés à la rentabilité vient renforcer les arguments à l'encontre d'un monopole public. (709)

R134. Le gouvernement de l'Ontario ne devrait pas instaurer l'assurance-automobile publique. (709)

K. RÉGLEMENTATION DES TARIFS (Chapitre 16)

C163. Une certaine forme de réglementation des tarifs, c'est-à-dire une révision des primes des assureurs par des gens de l'extérieur, est souhaitable sur le plan social, sinon sur le plan économique. Le public a droit à une certaine protection externe contre des primes déraisonnables ou injustes; par ailleurs, la réglementation des tarifs devrait donner une certaine stabilité au marché. (720-721)

C164. La structure du marché de l'assurance-automobile en Ontario convient à une industrie hautement compétitive. En raison du grand nombre d'entreprises au sein de l'industrie et de leur répartition relative selon leur taille, les possibilités de collusion ou de cartel sont faibles. (727)

C165. La conclusion selon laquelle l'industrie de l'assurance-automobile en Ontario est compétitive doit être nuancée à trois égards :

a) Le système de distribution par courtiers et agents fragmente le marché compétitif.
b) Dans certains marchés (par exemple, les taxis), la concurrence est très restreinte.
c) Le marché résiduel (l'Association des assureurs) n'est pas compétitif. (727-728)

C166. Les deux principaux objectifs de la réglementation des tarifs devraient être le caractère équitable des primes, évalué en fonction des principes reconnus de l'assurance, ainsi que la stabilité du marché, qui profitera au public. Une réglementation appropriée des tarifs devrait fournir un mécanisme de rentabilité qui garantira que les primes exigées par les assureurs sont justes et assurera la stabilité du marché. (728-729)

C167. La législation proposée en matière de réglementation des tarifs va empêcher les assureurs de faire preuve d'innovation dans leurs procédures de tarification. (729)

C168. Le modèle de réglementation de l'entreprise de services publics, sur lequel se fonde la législation proposée en matière de réglementation des tarifs, ne convient pas à une industrie compétitive, même si le produit est obligatoire. (731)

C169. Des audiences à l'échelle de l'industrie vont produire des tarifs ou des échelles de tarifs qui, dans de nombreux cas, sont plus élevés que ceux qui pourraient être produits par une tarification concurrentielle, de sorte que le public ne pourra pas profiter des avantages d'une véritable concurrence. En particulier, les consommateurs ne pourront pas profiter des tarifs inférieurs qui seraient exigés par les assureurs plus rentables sur un marché véritablement concurrentiel. (731-732)

C170. Le genre de processus envisagé par la législation proposée en matière de réglementation des tarifs donnera lieu à des augmentations des coûts, qui seront inévitablement transmises aux consommateurs. En somme, on refusera aux consommateurs l'accès aux primes moins élevées exigées par les assureurs plus rentables sur un marché concurrentiel. (733)

C171. Sans financement, la participation du public à des audiences à l'échelle de l'industrie ne peut pas être significative. (734)

C172. Les primes exigées par l'Association des assureurs sont moins élevées que ce que laissent supposer les coûts prévus des sinistres de ceux qui font partie de l'Association des assureurs, ce qui entraîne inévitablement un certain interfinancement. Par conséquent, l'approbation des tarifs de l'Association des assureurs fera appel à d'importantes considérations de politique sociale. (735-736)

R135. Le gouvernement de l'Ontario devrait adopter des mesures législatives en matière de réglementation des tarifs. La législation devrait prévoir *l'établissement d'une commission indépendante pour examiner et approuver les tarifs des assureurs. (720-721)*

R136. *Le gouvernement de l'Ontario ne devrait pas adopter, dans sa forme actuelle, la Loi de 1987 sur la Commission de l'assurance-automobile de l'Ontario. En particulier, la Commission ne devrait pas avoir le pouvoir d'établir des tarifs. Son pouvoir devrait se limiter à approuver des tarifs. (731-732)*

R137. *Quel que soit le processus d'approbation des tarifs qui est adopté, il ne devrait pas gêner indûment la concurrence. (734)*

R138. *La Commission devrait avoir le pouvoir d'approuver des tarifs différents, même lorsqu'il y a des améliorations au système de classification, pourvu que les tarifs soient justes, raisonnables et sensés. (729-730)*

R139. *Sinon, la Commission devrait disposer d'une autorité directe sur le système de classification et d'un pouvoir sans entrave pour le modifier. (729-730)*

R140. *Dans la mesure où la législation permet au public de participer aux audiences de la Commission, le gouvernement devrait prévoir des fonds raisonnables pour faire en sorte que la participation du public soit significative. (734)*

R141. *Dans le cas des risques honnêtes, on devrait mettre en place les anciens arrangements de l'Association des* *assureurs en matière de réassurance. Cette réassurance devrait se faire aux primes de l'assureur, sauf si ces primes sont inférieures au barème de tarifs établi par la Commission. (736-737)*

R142. Le Surintendant des assurances devrait pouvoir participer au processus d'approbation des primes de l'Association des assureurs afin de faire en sorte que les intérêts du public sont défendus. (737-738)

L. PRÉVENTION DES ACCIDENTS D'AUTOMOBILES (Chapitre 17)

C172. Les personnes tuées dans des accidents d'automobiles sont généralement jeunes, en santé et de sexe masculin. Les accidents d'automobiles constituent la principale cause de décès pour les hommes âgés de 15 à 24 ans. (740)

C173. En dollars de 1985, les pertes économiques occasionnées par les accidents d'automobiles en Ontario s'élèvent à environ 1,7 milliard de dollars. (742)

C174. La réduction de la limite de vitesse a contribué à réduire la fréquence et la gravité des accidents; l'utilisation obligatoire de la ceinture de sécurité a également contribué à réduire la gravité des accidents. (760-761)

R143. La responsabilité de la sécurité de la circulation devrait être confiée à un ministère gouvernemental ou à un organisme indépendant. (752-753)

R144. *Les variations de vitesses augmentent les risques d'accidents et devraient être contrôlées. On devrait faire respecter les vitesses minimums et maximums. (760)*

R145. *Les parents qui sont accusés d'avoir omis d'utiliser les dispositifs de retenue des enfants dans les automobiles devraient avoir le choix de payer l'amende ou de prouver au tribunal qu'un dispositif a été acheté, loué ou emprunté. (762)*

R146. *On devrait étudier davantage la question de l'âge minimum pour consommer des boissons alcooliques et de l'âge minimum pour conduire. (767)*

R147. *On devrait assurer l'éducation des conducteurs bien avant l'âge de 15 ans; cet enseignement devrait être fourni dans le cadre d'un cours sur le comportement social acceptable et non dans le cadre d'un cours rapide en vue de l'obtention d'un permis de conduire. (767)*

Volume

1

Report of Inquiry into Motor Vehicle Accident Compensation in Ontario

2

The Honourable Mr. Justice
Coulter A. Osborne
Supreme Court of Ontario
Commissioner

Volume I

Ontario

1988

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Ontario

The Honourable
Mr. Justice
Coulter A. Osborne
Commissioner

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Inquiry Into Motor Vehicle Accident
Compensation in Ontario

Enquête sur l'indemnisation des
victimes d'accidents d'automobiles
en Ontario

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February 11, 1988

The Honourable Ian G. Scott
Ministry of the Attorney General
18 King Street East
18th Floor
Toronto, Ontario
M5C 1C5

Dear Mr. Attorney:

With this letter I transmit my Report of the Inquiry Into Motor Vehicle Accident Compensation in Ontario.

Yours very truly,

Coulter A. Osborne
Commissioner

Encl.

Ontario

The Honourable
Mr. Justice
Coulter A. Osborne
Commissioner

John I. Laskin
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February 11, 1988

The Honourable Robert F. Nixon
Ministry of Financial Institutions
7th Floor, Frost Building South
7 Queen's Park Crescent East
Toronto, Ontario
M7A 1Y7

Dear Mr. Minister:

With this letter I transmit my Report of the Inquiry Into Motor Vehicle Accident Compensation in Ontario.

Yours very truly,

Coulter A. Osborne
Commissioner

Encl.

Ontario
Executive Council

Order in Council

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that

WHEREAS the Report of the Ontario Task Force on Insurance tabled in the Legislature on May 6, 1986 recommended that the Ontario Government work with the insurance industry to devise a framework for the private delivery of a new system of personal injury compensation and the elimination of resort to the law of tort and the litigation process with respect to personal injury compensation from automobile accidents;

AND WHEREAS the Ontario Law Reform Commission submitted a Report on Motor Vehicle Accident Compensation in 1973 recommending that provisions be made for compensating, without regard to fault, all pecuniary losses due to personal injury, property damage or death caused by a motor vehicle, by means of a compulsory motor vehicle accident insurance policy to be carried by the owner of every motor vehicle and that first party insurance should be adopted as the method of underwriting no-fault motor vehicle accident compensation;

AND WHEREAS the Select Committee of the Legislature on Company Law recommended the creation of a no-fault insurance scheme for compensation for injury suffered as a result of a motor vehicle accident;

AND WHEREAS concerns have been raised about the availability and affordability of automobile insurance in Ontario;

AND WHEREAS the Ontario Task Force on Insurance received many thoughtful and constructive suggestions for tort reform which would enhance the predictability of risk and the ability of the insurance industry to serve the public and concluded that some of the suggestions have immediate merit but others require more careful study;

AND WHEREAS the Ontario Task Force on Insurance concluded that serious research and planning should be undertaken in Ontario in anticipation of fundamental reforms to the current accident compensation and deterrent systems;

AND WHEREAS it now appears desirable to evaluate the merits of the existing tort system of compensation for injury by automobile accident, various recommendations for improvement of the tort system and the question of whether a no-fault automobile accident compensation system would better serve the people of Ontario;

NOW THEREFORE on the recommendation of the Attorney General and the Minister of Financial Institutions, the Lieutenant Governor by and with the advice and concurrence of the Executive Council, orders that the Honourable Coulter Arthur Anthony Osborne, a Judge of the Supreme Court of Ontario, member of the High Court of Justice and ex officio a member of the Court of Appeal, be authorized to inquire into and report to the Attorney General and Minister of Financial Institutions by November 1st, 1987 on the tort system of compensation for injury by automobile accident and the consequences of the implementation of a no-fault automobile accident insurance scheme and, in particular, to consider and report on:

> The adequacy, timeliness and fairness of compensation to accident victims under the present tort system;
>
> The effectiveness of the tort system as a deterrent and compensation mechanism;
>
> The implications of removing tort liability as a basis for compensation in automobile accidents and replacing it with a no-fault system;
>
> The cost savings and effectiveness of a no-fault system for compensation for claims arising out of automobile accidents;
>
> The appropriate design of a no-fault automobile insurance system for Ontario, including the effectiveness of deterrence in a no-fault system, the effectiveness of driver performance related rating systems and standards for rating under such a no-fault automobile insurance system;
>
> The desirability of a modified no-fault system with some form of threshold at which recourse to the tort system would be allowed;
>
> The basis for determining compensation for injury or death in a no-fault system;

Dispute resolution and appeal processes for claims in a no-fault system;

The need in a no-fault system for a catastrophic claims fund or pooling mechanism to protect small insurers;

Private versus public delivery of a no-fault system of automobile insurance; and.

The role of government in any proposed no-fault system;

AND THAT an Advisory Committee shall be established by His Lordship to be comprised of members appointed in consultation with the Attorney General and Minister of Financial Institutions;

AND THAT His Lordship may, if he deems it advisable, request the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, to provide him with any additional powers or resources necessary in order to carry out his duties and functions;

AND THAT all Government Ministries, Boards, Agencies and Commissions shall assist His Lordship to the fullest extent in order that he may carry out his duties and functions, and that he shall have authority to engage such counsel, expert technical advisors, investigators and other staff as he deems it proper, at rates of remuneration and reimbursement to be approved by the Management Board of Cabinet;

AND THAT the Ministry of the Attorney General and the Ministry of Financial Institutions shall be responsible for providing administrative support to the inquiry.

Recommended ______________ Concurred Jim Bradley
Attorney General Chairman

Recommended ______________
Minister of Financial Institutions

Approved and Ordered November 6, 1986 ______________
Date Lieutenant Governor

FOREWORD

Through this short note, I express my appreciation to a loyal and most helpful staff.

To Inquiry administrator Thomas Millar I offer my thanks for efficiently relieving me of virtually all the unwanted burdens of administration. I am also grateful to our librarian Ishmael Doku, Kersi Chesson and the ever helpful Harry Rickard for consistently making life easier for me during this Inquiry.

I want to especially recognize the contributions of Inquiry secretaries Helen Warburton, Eveline Bill, and in the latter stages, Gail Estabrooks and Elizabeth Sinclair. I also wish to thank Marian Makar, Lucy Villamagna, Linda Haines and MaryAnne Kneif for their dedicated assistance throughout the production of this Report.

Our actuary, Joe Cheng, who cerebrates at a different level from us all, made it possible for me to begin to understand the principles of insurance and the anatomy of automobile insurance claims. I thank him for his patience, help and understanding.

I particularly want to mention the work of Nancy Reason and Saskia Matheson. Both were of invaluable assistance. My thanks as well to Steven Sharpe for his help through the hearings stages of this Inquiry.

Then there is John I. Laskin. In this short space, I cannot adequately express my appreciation for John Laskin's work from the very beginning of this undertaking to the completion of this Report. A keenly analytical mind, wise counsel, a sound sense of basic fairness and plain hard work are among John Laskin's many contributions to this undertaking.

To all the inhabitants of the 22nd Floor, 180 Dundas Street West, who were involved in this work, I offer my thanks.

COMMISSIONER

The Honourable Mr. Justice Coulter A. A. Osborne

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CHAPTER 1

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Although there are eleven issues specifically referred to in the Order-in-Council establishing this Inquiry, two issues, no fault automobile insurance and public automobile insurance, dominate.

The notion of no fault automobile insurance is not new. It was recommended in 1932 in what has come to be known as the Columbia Report. A form of no fault automobile insurance was proposed by Professors Keeton and O'Connell in 1965. In Ontario, no fault automobile insurance was recommended by the Ontario Law Reform Commission in 1973, in a modified form by the Select Committee on Company Law in 1978 and by the Ontario Task Force on Insurance in 1986. We have had no fault compensation for workplace injuries in Ontario since 1914. No fault benefits have been a part of the Ontario automobile insurance policy since 1972.

Threshold no fault automobile insurance is an American no fault/tort system compromise. Threshold no fault was first introduced in the United States in the 1970s. In threshold no fault, expanded no fault benefits are funded by denying the less seriously injured compensation for pain and suffering.

In considering the appropriate system of compensation for those injured in motor vehicle accidents in Ontario, I have looked to the experience of other jurisdictions such as Quebec, Australia, New Zealand, Great Britain, Switzerland, France, West Germany and a number of American states. It quickly became apparent to me that motor vehicle accident compensation should not be considered in a vacuum. Social conditions, the availability of long-and short-term disability coverage and existing social programmes must all be taken into account.

We live in a province which provides universal medical and hospital care. Billing beyond the schedule of fees prescribed by O.H.I.P. has been prohibited. No fault benefits are a compulsory part of the standard form of automobile insurance policy. Automobile insurance third party limits are $200,000. The average insured motorist has third party coverage of more than $500,000. Automobile insurance is compulsory. Less than 2% of Ontario drivers are uninsured. All Ontario drivers have uninsured/unidentified coverage. Over 90% of Ontario drivers have underinsured coverage. Non-economic compensation is capped at $100,000 (1978 dollars). Jury verdicts are subject to reasonable review by our appellate courts. Few motor vehicle accidents clog our courts at the trial level.

Steadily increasing bodily injury claims costs have led some to conclude that Ontario is now, or is soon to become, the "California of the North". This conclusion seems to me to be more rhetorical than substantive. It is consistently supported by anecdotal evidence, data confirming the steady increase in bodily injury loss costs and a specific reference to one case, McErlean v. City of Brampton. I have chosen to ignore the anecdotal evidence and I have attempted to determine if and why bodily injury loss costs have increased. The relevance of the above-mentioned McErlean case, the flagship of the "California of the North" fleet, has been dramatically reduced because of the Court of Appeal's reversal of the trial judgment on both liability and damages. The judgment of the Court of Appeal seems to me to have reduced the anxiety levels of some segments of the insurance and reinsurance industries. I note that the November 1987 issue of the Canadian

Underwriter contained this comment in a concluding reference to the Court of Appeal's judgment--"Goodbye California of the North".

Threshold no fault has been recommended by many, including the Insurance Bureau of Canada. The model most frequently looked to is Michigan's threshold no fault plan. I thought it necessary to review and assess the Michigan threshold no fault compensation scheme in some depth. I have travelled to Michigan, discussed the Michigan plan with state legislators, the Michigan Commissioner of Insurance and his staff. I have sought the views of Michigan judges and lawyers on compensation and insurance issues. In the end result, I think I understand why Michigan introduced threshold no fault automobile insurance and how the Michigan plan has operated in practice.

Social conditions and insurance circumstances prevailing in Ontario are far different from those which dominated the Michigan motor vehicle accident compensation debate in the 1970s. For reasons which will be developed in the main body of this Report, I have concluded that aside from the provision of a modest degree of additional stability for automobile insurers, cost/premium decreases would be modest were we to proceed to threshold no fault and those modest cost savings would be imported on the backs of over 90% of injured Ontario motorists who now have the right to seek non-economic compensation.

I should make it clear at the outset that were the tort system alone to be a compensation option, I would reject it out of hand. There is, however, room for peaceful co-existence between tort and no fault. Humane rehabilitation and long-term care can be provided on a no fault basis. Death benefits, reasonable income replacement benefits, homemakers' benefits and provision for child care, can also be provided on a no fault basis. This can be done at a reasonable cost and without eroding the values inherent in tort law which I view to extend beyond the perimeters of compensation and deterrence.

I do not accept the argument that either pure no fault or threshold no fault automobile insurance is justified as a first step to comprehensive accident or disability compensation. While I am of the view that comprehensive compensation ought to be given further consideration, in practical terms, we are not remotely close to implementing a system of comprehensive compensation for accident victims or for the disabled. The second step is too far removed from the first step. Thus, the first step must be looked at on its own. There are existing problems which require immediate, common sense solutions. It seems to me realistic, quite apart from the provisions of the Order-in-Council establishing this Inquiry, that I consider no fault automobile insurance on its own merits.

In the end result, I hope after considering all positions fairly, I have reached the conclusion that existing no fault benefits ought to be substantially expanded, made truly no fault in their character and that the right to individual compensation in the tort system ought to be maintained. In the system I have proposed, the need to sue has been reduced; the right to sue has been preserved. Having looked at a great number of compensation systems, in the final analysis, it seems to me that while our system is far from perfect, Ontario should be an exporter, not an importer of compensation systems.

There is, as well, the public automobile insurance issue. Quebec, Manitoba, Saskatchewan and British Columbia all deliver automobile insurance through public monopolies. Saskatchewan's plan has been in place since 1946. While it can be said that there is a lengthy history of a free market economy in Ontario, public delivery of automobile insurance in Canada has been established for a considerable time in four of ten Canadian provinces. I have looked to the experience of those provinces having public plans for guidance.

I have attempted to deal with the public automobile insurance issue by asking and then answering this central question, "Will Ontario's motorists be the beneficiaries of efficiency gains and thus lower premiums were Ontario to deliver automobile insurance through a public monopoly?"

In the absence of clear and convincing evidence of efficiency gains, it seems to me that there is no more justification for nationalizing the automobile insurance industry than there is for nationalizing any other industry.

While the private sector automobile insurance industry has in many respects been its own worst enemy, sensible rate regulation and reasonable external control of claims and underwriting practices should eliminate many problems about which consumers have legitimately complained. There is no reliable evidence that consumers will benefit were Ontario to nationalize the automobile insurance industry and deliver automobile insurance through a public monopoly.

The following is a summary of the major findings and the recommendations contained in this Report. Both the findings and recommendations are listed by subject. The findings are prefaced by the letter "F" and the recommendations by the letter "R". The number in brackets after each finding and recommendation indicates the page(s) in the Report where the finding or recommendation is located.

A. THE AUTOMOBILE INSURANCE INDUSTRY IN ONTARIO (Chapter 4)

Structure

F1. The automobile insurance market in Ontario is unconcentrated. Based on premium income the top ten insurers in Ontario have 53% of the market; the top twenty insurers have 74% of the market. (95)

F2. Approximately 98% of motor vehicle owners in Ontario are insured. (97)

F3. As of August 1987, 1.7% of private passenger vehicles in Ontario were insured through the Facility Association. Facility Association private passenger basic premiums are about 205% of the weighted average standard market premiums. As of its 1986 year-end, the Facility Association showed a deficiency of expenses over revenue of $29.6 million; Ontario's losses equal 52% of the total Canadian losses, or more than all the other provinces combined. (101-102)

F4. 28.79% of Facility Association drivers are five-year claims-free drivers; 80.79% of those insured through the regular market are five-year claims-free drivers. (105)

F5. The loss experience for Toronto fleet taxis is so bad that even with the substantial Facility Association premiums, taxi risks are almost uninsurable. In 1985 3.6% of Toronto territory taxis were insured through the Facility Association; in 1986, 50.3% of Toronto territory taxis were insured through the Facility Association. The regular market has stopped writing taxi business except for owner-operated taxis and in some circumstances co-operative taxis. (107-108)

F6. Ontario drivers insured in the regular market are subsidizing through their premiums those insured in the Facility Association. (109)

Marketing

F7. About 74% of automobile insurance sold in Ontario measured by premiums is provided through independent brokers; virtually all of the remaining 26% is marketed through direct sales agents. (109)

F8. A broker may represent any number of insurers and as few as one insurer (aside from a Facility Association servicing carrier). (111-112)

F9. Brokers are and will likely continue to be an integral part of the automobile insurance delivery system in Ontario. (113)

F10. Independent brokers are not independent once under contract to an insurer. At that point brokers are largely dependent for economic survival on the insurers they represent. (114)

F11. Insurers provide a great variety of incentives and rewards to their brokers, the cost of which increases business acquisition expense and eventually premiums. (114)

F12. The established insurers/broker structure reeks of conflict. The broker often chooses one insurer over another in consideration of a number of factors unknown to the applicant for automobile insurance. (114)

F13. The quantum of the broker's commission is almost never disclosed to the consumer; the consumer knows neither the commission rate nor the variation in commission rates among insurers the broker represents. (114)

F14. The broker has no obligation to disclose and often does not disclose any competitive premiums even among those insurers represented by the broker. As a result, in many instances, the consumer has limited information about premiums of the broker's other insurers and no access to information about companies not represented by the broker. (115)

F15. The broker's right to represent an insurer can generally be terminated on relatively short notice. Termination can have a detrimental effect on both the insured and the broker. (115)

F16. An insurer's termination of its contractual arrangements with brokers typically arises as a result of poor loss ratio, unacceptable mix of business, the failure to satisfy the insurer's accompanying business requirements, unacceptable balance of business and inadequate volume of business. (116)

F17. Insurers should be prohibited from using the number of occasions within a given period that an applicant for insurance has changed insurers as an underwriting criterion. (128-129)

R1. Brokers should not be required to belong to any specific association or organization. (110)

R2. The education programmes sponsored by the I.B.A.O. and the T.I.C. are useful and should be encouraged. (110)

R3. A control mechanism should be established, so that insurers represented by a given broker can be identified and so that brokers who represent no automobile insurer other than a Facility Association servicing carrier can also be identified. (111)

R4. At regular intervals throughout the year, the Office of the Superintendent of Insurance should *publish basic rates of automobile insurance to ensure province-wide exposure. The consumer should also be informed of typical surcharges. (119)*

R5. Brokers and agents should be required to display prominently the names of insurers for whom they act. (120)

R6. Each broker should clearly identify the broker's Facility Association servicing carrier.

R7. All brokers should be required by legislation to provide access to the residual market (the Facility Association) through a designated servicing carrier.

R8. In cases other than fraud, dishonesty, etc. insurers should be required to give some minimum notice of termination to brokers. The minimum notice period should be examined through consultation between insurers and brokers. (120-121)

R9. Insurers terminating contracts with brokers should be required to give specific reasons for the termination. An arbitration structure through the I.B.C. and the I.B.A.O. to deal with broker/insurer disputes, including terminations, should be established. (121)

R10. An insurer terminating its contract with a broker because of mix, balance or volume of business, or loss ratio, should be encouraged to enter into a rehabilitation programme with the terminated *broker. Automobile insurance companies and brokers, together with the Superintendent of Insurance and R.I.B.O., should enter into discussions to establish guidelines for the use of rehabilitation programmes particularly when loss ratio is the basis of an insurer's decision to terminate its contract with a broker. (121-122)*

R11. *Upon a broker cancellation by an insurer, the cancelled broker should be obligated to inform the insured that he is no longer acting for that particular insurer and that if the consumer wishes to continue with that insurer, the consumer should contact the insurer to obtain information about other brokers writing its business. (123)*

R12. *The guidelines for broker termination established by the I.B.C. and the Canadian Federation of Insurance Agents and Brokers Association should be implemented. The Superintendent of Insurance should carefully monitor broker terminations to ensure these guidelines are being followed and to ensure that insureds will not be unfairly affected by having to pay increased premiums as a direct result of the insurer's termination of a broker. An insured should not be adversely affected by issues having relevance only to a broker and an insurer. (123-125)*

R13. *A breakdown of an insured's automobile insurance premium payment, including the broker's commission, should be provided in all cases. (125)*

R14. *The broker's Facility Association commission is no different than any other commission and should be disclosed to the consumer. (127)*

R15. *Brokers should be encouraged to give premium quotations by telephone. These quotations should be non-binding. (127)*

R16. *The Registered Insurance Brokers Act should be amended to prohibit any broker from acting only for a Facility Association servicing carrier. (128)*

R17. *Banks and trust companies should be entitled to market automobile insurance. (128)*

R18. *The prohibition on part-time brokerage activity should be re-examined. (128-129)*

R19. *Insureds having a claim against a negligent broker should not be denied compensation from the broker's liability insurer because of policy violations by the broker. (129)*

B. COVERAGE AND DELIVERY PROBLEMS (Chapter 5)

Coverage and Delivery

F18. There are relatively few consumer complaints related to the resolution of bodily injury and property damage claims. (140)

F19. Insureds have no real access to any dispute mechanism through which to challenge the allocation of fault as determined by the fault chart. (141)

F20. Third party liability limits should not be open-ended because of solvency considerations; even the benefits attendant upon increased policy limits do not out-weigh the costs. (142)

F21. Delay is a problem in the payment of third party bodily injury claims. The root cause of delay aside from congested court lists in some areas is the lump sum payment compensation system which requires bodily injuries and disabilities to be stabilized before settlement or trial can realistically be considered. The bodily injury delay problem does not have anything to do with the automobile policy or with automobile insurers. (143)

F22. Delay is not a problem in the resolution of property damage claims. (143)

F23. The concept of the O.H.I.P. Bulk Subrogation Agreement is sound. The O.H.I.P. agreement has resulted in significant cost savings. (146)

F24. O.H.I.P. is sustaining losses by reason of the fact that some insureds have established special arrangements through fronting policies with their automobile insurer. (147-148)

F25. Because of the looseness of the definition of rehabilitation and its interpretation by insurers many injured persons in need of rehabilitation and contractually entitled to it are not receiving it. (161)

F26. The contractual obligation on the part of insurers to pay first party rehabilitation benefits only upon the rehabilitation expense having been incurred is destabilizing and results in delayed or no rehabilitation in many cases. The system has not properly responded to the rehabilitation needs of those injured in motor vehicle accidents who reasonably require out-of-hospital rehabilitation. (162)

F27. The insurer through its medical advisor should not have *prima facie* veto rights over proposed rehabilitation; the insured's medical advisor's opinion as to rehabilitation and the opinion of rehabilitation counsellors should be of primary evidentiary significance. (162-163)

F28. Very few insurers recognize the cost effectiveness of rehabilitation. The four-year rehabilitation time limit has encouraged some insurers to ignore rehabilitation in the hope that its direct costs will disappear. (163)

F29. Better coordination of medical and rehabilitation no fault resources is needed. More, not less, of the disability dollar should go to rehabilitation in those relatively few but serious cases in which rehabilitation would be of assistance to the injured person. (165)

F30. The present system lacks an effective dispute resolution mechanism. The net result is that in many cases rehabilitation is not undertaken or is undertaken so long after the accident as to limit its effectiveness. (165)

F31. The $140 per week maximum disability benefit which was established in 1978 is inadequate. (166)

F32. The insurance industry's performance in the delivery of disability benefits is in general abysmal. (166)

F33. There are gaps in the definition of those who are entitled to disability benefits. (167)

F34. The 30-day return-to-work relieving provision contained in Section B of the automobile insurance policy is too short. It provides a disincentive to returning to work. (169-170)

F35. There is no effective internal or external disciplinary mechanism which would provide insurers with an incentive to extend disability payments to insureds entitled to them without undue delay. (170)

F36. The funeral benefit is too low. (172)

F37. No fault coverage should not be limited by incorporating within it exclusions related to driving conduct; suicide and attempted suicide, however, are justifiable exclusions as they reflect intentional conduct. (173)

F38. Repair costs in Ontario compare favourably with those in other provinces. (175)

F39. Where after-market parts are available, competition between car maker parts and after-market parts has reduced prices by 25-40% depending on the type of repair involved. (177-178)

F40. Uninsured/unidentified motorist coverage does not belong in Section B of the policy. (181)

R20. The $200,000 minimum third party liability limits should continue. Those wishing to receive additional protection can do so by purchasing either additional third party liability or SEF 44 underinsured coverage or both on an optional basis. (143)

R21. The structure of the O.H.I.P. Bulk Subrogation Agreement should be examined to ensure that O.H.I.P. is paid whatever health care costs to which it is entitled as a result of motor vehicle related accidents. (150)

R22. The Insurance Act should be amended to require that all licensed automobile insurers be part of the 1978 O.H.I.P. Bulk Subrogation Agreement. (151)

R23. Consideration should be given to expanding the concept of the 1978 O.H.I.P. Bulk Subrogation Agreement to include other claims, (for example, medical malpractice), where O.H.I.P. subrogation is on a case-by-case basis. (151)

R24. *Where future care costs are established at trial or by settlement, O.H.I.P.'s interest, if any, in the future care costs should be identified by the trial judge or by the settlement documentation. The present value of O.H.I.P.'s future care cost interest should be paid to O.H.I.P. (151-152)*

R25. *A study should be undertaken to determine if the first party underinsured and unidentified/uninsured coverages should be brought within the O.H.I.P. Agreement so that there will no longer be claim-by-claim subrogation in cases where those coverages are applicable. (152)*

R26. *Any insured and insurer entering into an agreement whereby the issued policy is a fronting policy or where any endorsement or other agreement results in the insured being a self-insurer, should be required to report the existence of such an arrangement and its terms to the Superintendent of Insurance. The insurer and the insured should jointly be required to pay the amount O.H.I.P. would otherwise have received had the special arrangement not been entered into. In the event that O.H.I.P., the insurer and insured cannot agree, the Superintendent of Insurance should have the authority, after consulting those involved, to deem a premium, if practical, in order to establish the base for the application of the O.H.I.P. bulk subrogation percentage factor. Alternatively, O.H.I.P. should have the right of subrogation on a case-by-case basis in those circumstances where the insured is a self-insurer. (153)*

R27. *Tighter controls should be imposed to ensure that cases which should be processed through the Workers' Compensation system are not processed through O.H.I.P. (153-154)*

R28. *Any other government ministries expending funds for those injured by accident should be required to determine and record the cause of the accident. (154)*

R29. *Chiropractors should be permitted to provide the certification of disability for disability benefit payment purposes. (169)*

R30. *The definition of spouse for the purpose of the no fault death benefit should be the same as the definition of spouse in the* Family Law Act, 1986 *(F.L.A.). (172)*

R31. *The expansion of appraisal centres should be encouraged. (176)*

R32. *All insurance companies should be required to establish quality and service guidelines for the use of aftermarket parts. Parts should be of O.E.M. quality and the quality should be guaranteed by both the supplier and the insurer. Consumers should be informed of the name of the manufacturer of the auto part being used in the repair. There should be severe penalties for the importation or sale of substandard, counterfeit or look-a-like auto parts. (179)*

The Automobile Insurance Policy

F41. Taken as a whole, the standard form of automobile insurance policy is badly structured and incomprehensible. (134-135)

R33. *A committee should be established to re-draft the standard automobile insurance policy. Drafting should not be left solely to lawyers or committees of the insurance industry. (184-185)*

R34. *The general definitions and provisions should be those which apply to the entire policy without exception. Definitions and provisions which apply to particular parts of the policy should be in the relevant part of the policy. (185)*

R35. *Exclusions relevant to each part of the policy should be contained in that part so that there is a clear understanding as to what coverage is excluded. (186)*

R36. *The policy should be structured as follows: (186)*

Part 1: Third Party Liability

Part 2: No fault Benefits:

- *(i) medical and rehabilitation benefits*
- *(ii) disability benefits*
- *(iii) death and funeral benefits*
- *(iv) other benefits*

Part 3: Vehicle Damage:

- *(i) collision*
- *(ii) comprehensive*
- *(iii) specified perils*
- *(iv) all perils*

Part 4: Uninsured/Unidentified Motorist Coverage

Part 5: Supplementary Benefits respecting Accidents Occurring in Quebec

Part 6: Statutory Conditions, Policy Provisions and Definitions

- *(i) Statutory Conditions*
- *(ii) General Provisions and Definitions*

Part 7: Endorsement Coverage including SEF 44.

C. INSURANCE PRINCIPLES, THE CLASSIFICATION SYSTEM AND UNDERWRITING (Chapter 6)

F42. Premiums paid by an insured should reasonably reflect the degree of risk the insured imposes on the system. The grouping of risks with similar risk characteristics for the purpose of setting prices is a fundamental precept of any workable private voluntary insurance system. The classification of risks is fundamental to insurance. (189-190)

F43. The "good until proven otherwise" approach to premium rating is fundamentally flawed. Rating judgments have to be made before, not after, the event. (194)

F44. Cross-subsidization of a particular group or cell by others within the system runs counter to the competitive dynamics of the private sector delivery of insurance. (196)

F45. A classification system must be measured against a number of efficiency and equity criteria. Significant criteria include homogeneity, separation, reliability, acceptability and incentive value. (197-199)

F46. Young (under 25) drivers are involved in proportionately more accidents and more severe accidents than other drivers. (202)

F47. Young (under 25) males are involved in more frequent and more severe accidents than young females. (207-209)

F48. Substituting years licensed for age as a rating variable is imperfect in that:

(i) given the probable age of members of any classification cell as defined by years licensed, substituting years licensed for age will not in substance eliminate age as a rating criterion;

(ii) years licensed does not take into account data which consistently demonstrate that young newly-licensed drivers present a greater risk than older newly-licensed drivers.

(iii) Age (and sex) will not be ignored at the underwriting level. (212-213)

F49. Unlike age, sex in its own right is not predictive; however, eliminating sex as a rating factor and substituting kilometres driven will expose the system to increased verification costs which will be passed on to the consumer in the form of increased premiums; there is also a question as to the reliability of the substitute. (213)

F50. It is likely that increased premiums for young females will result from abandoning sex as a rating variable. (214)

F51. The predictive force of marital status as a rating factor is suspect and it has in any event become a socially unacceptable rating factor. (203)

F52. The introduction of a bonus/malus system on its own is neither workable nor consistent with the fundamental principles of insurance. Charging demonstrably unequal risks, equal premiums at entry violates basic insurance principles and leads to cross-subsidization. An insured's accident record and conviction record have a place in premium setting, but they cannot be used alone; they must be part of a sound classification system consistent with fundamental principles of insurance. (220)

F53. In order to operate with any degree of efficiency, a bonus/malus classification system requires complete exchange of information among insurers. (223)

F54. Injustices can occur in a bonus/malus system because malus points are triggered by claims against the policy quite apart from the identity of the driver of the insured automobile at the time of an accident. (223-224)

F55. Underwriting abuses which existed through 1986 and into 1987, in some respects, continue to exist in the Ontario automobile insurance industry. (237)

F56. Motorcycles present a problem from a standpoint of first party no fault coverage. Those injured on motorcycles being relatively unprotected tend to suffer more severe injuries than those injured in automobile accidents; further the owner/driver population of motorcyclists tends to be young. (237-238)

F57. Taxis present a unique premium problem; the root cause of the taxi industry's premium problems is high loss costs. Even at the high current premium levels Ontario motorists are subsidizing taxis and taxi operators outside of Toronto are subsidizing taxi operators located in Toronto. (239-240)

R37. Marital status should no longer be used by the automobile insurance industry as a rating factor. (203)

R38. The proposed classification which eliminates age, sex and marital status as rating factors should be discussed and evaluated outside the parameters of the committee established to create it. The impact of the system on the premiums consumers will be required to pay should be disclosed and discussed. (217)

R39. *The resort to the number of insurers any applicant for insurance has had over any particular timeframe as an underwriting criterion should be prohibited and deemed an unfair underwriting practice. (230)*

R40. *Named occasional drivers should be excluded from automobile insurance coverage in circumstances where both the named insured and the occasional driver have acknowledged in writing that coverage is not sought and is not to be extended to the named occasional driver. (231)*

R41. *A new offence should be created so as to penalize the named insured in those cases where the named insured has given consent to the excluded occasional driver's use of the insured vehicle. (232)*

R42. *A new offence, short of theft and in addition to driving without insurance, should be established to penalize an excluded occasional driver who has driven the insured's car with or without consent. (232)*

R43. *The loss experience of the Facility Association should be continually monitored; steps should be taken to attempt to identify those clean risk drivers who demonstrably do not belong in the Facility Association from those risks, clean or otherwise, that the regular market cannot reasonably be expected to underwrite. (234-235) See also R141.*

R44. *The basic premium rating for three-wheel all terrain vehicles, four-wheel all terrain vehicles and other off-road vehicles such as snowmobiles should be examined as part of structuring the new classification system. (239)*

R45. *The recommendations contained in the 1987 Report of the Metropolitan Licensing Commission concerning the taxi industry should generally be endorsed. (241)*

R46. *There should be better driver education and control, possibly through the use of incentives, for taxi drivers. (241)*

D. LOSS COSTS AND PREMIUMS (Chapter 7)

Loss Costs

F58. Property damage loss costs per vehicle have remained relatively stable. (248)

F59. There has been a steady increase in bodily injury loss costs since 1982. (248)

F60. The property damage component of third party liability coverage has remained relatively stable. Accident benefit loss costs have increased but are under control. The loss cost problem area is in bodily injury claims. (250)

F61. Non-pecuniary general damages represent the single most significant component of damages regardless of the size of the claim. As the size of the claim increases, the proportion of non-pecuniary general damages decreases. In smaller claims, non-pecuniary general damages account for approximately 70% of the claims settlement dollar. For claims above $75,000, non-pecuniary general damages account for approximately 25% of the claims settlement dollar. (262)

F62. Party-and-party costs paid to counsel for injured claimants account for 11% of the claims dollar. Prejudgment interest accounts for 10% of the claims dollar and F.L.A. claims account for approximately 5% of the claims dollar. (262-263)

F63. There are a number of explanations for the increase in bodily injury claims costs. These include:

(i) economic loss increases in times of economic prosperity; (269)

(ii) economic prosperity leads to more driving. As traffic density increases, accident frequency increases; (269)

(iii) since 1980, the discount rate has been established by statute at 2.5%; in 1978 a 7% discount rate was commonly used; (270)

(iv) the 1978 decisions of the Supreme Court of Canada in the Trilogy have forced trial judges and juries to break down damage assessments into reasonable constituent parts. This breakdown has resulted in a higher calculation of economic loss; (270)

(v) injured claimants have increasingly retained counsel to represent their interests. The involvement of counsel on balance will result in an increase in the settlement value of a claim; (270)

(vi) lawyers are increasingly inventive in their development of evidence to establish economic loss which in turn has increased economic loss damage assessments; (271)

(vii) experts are more capable of giving evidence in a manner that is convincing to trial courts and on balance this has resulted in an increase in damages; (271)

(viii) in cases where future care costs are significant or in major fatal accident cases gross-up significantly increases claims costs; (272)

(ix) health care advances have resulted in badly injured persons surviving at great expense over a significant, albeit reduced, life expectancy; (272)

(x) the pre-trial process has generally worked to increase the value of claims; (272)

(xi) Family Law Reform Act (F.L.R.A.) and F.L.A. claims have increased damages; however, recent increases in bodily injury claims costs cannot be attributed to F.L.A. claims; (273)

(xii) prejudgment interest has had a significant impact on the costs of bodily injury claims; (273)

(xiii) while judicial generosity is overplayed by insurers, there is no doubt that economic loss has increased and the judicial treatment of it has been more generous, particularly in the case of future care costs. This has increased bodily injury costs. However, in the last few years, trial judges and juries have become more moderate in their treatment of non-pecuniary compensation, particularly in respect of F.L.A. claims. (274)

Premiums

F64. Although third party liability/property damage premiums increased substantially in 1985 and 1986, the 1986 level was still less than the premium level in 1977. (277)

F65. The accident benefit premium line has been relatively unstable but the variations from year to year have not been large. In constant dollars, accident benefit premiums in 1986 were marginally lower than accident benefit premiums in 1976 and about the same as accident benefit premiums in 1981. (277)

F66. Section C collision premiums in 1986 were substantially lower than their high point in 1977 and about the same as they were in 1983. (277)

F67. Section C comprehensive premiums have increased substantially since 1975. (277)

F68. The composite all coverages premium trend follows the same general path as third party liability premiums. Even after the substantial 1985/1986 increase, the premiums were still less than premiums in 1977, when measured in constant 1981 dollars. (278)

Loss Costs and Premiums

F69. The bodily injury/property damage cost premium gap was at its widest in 1977 when premiums significantly exceeded costs and in 1985 when loss costs significantly exceeded premiums. (279)

F70. Reserves should be discounted in order to provide a realistic assessment of an insurer's performance. (283)

F71. The insurance industry took no real account at any time and particularly in the early 1980s of the probable impact of prejudgment interest and F.L.R.A. claims. Insurers also did not take reasonable account of the probability that claims costs would necessarily increase once the recession of the early 1980s ended and relative prosperity returned. (285)

F72. Given bodily injury loss cost trends, premiums which should have been increased earlier and more gradually, were increased in 1985/86. By 1985/86 the premium increase was probably justified, but given its sudden implementation consumer complaints were to be expected. (283-285)

F73. The property damage part of the third party liability coverage presents no real cost problem and should not be the source of a premium concern. (295)

F74. Accident benefit coverage is an area where there has been an increase in average claims costs;

however, there is not a cost/premium problem for this coverage. (295)

F75. There is no cost/premium problem with the optional collision and comprehensive coverage lines.

F76. Bodily injury frequency has stabilized. (296)

F77. As long as bodily injury average loss costs per car continue to increase, premiums will increase. (296)

F78. The 1985/86 bodily injury/property damage premium increases brought premiums and loss costs into a semblance of balance. There are current indications of moderation within the system at the third party level. (296-297)

E. COURT PROCEEDINGS (Chapter 9)

Pleadings

F79. In motor vehicle accident litigation, pleadings are unnecessarily complex; pleadings particularizing negligence are of no real benefit. (344)

R47. The Rules of Civil Procedure should be amended to eliminate the requirement that pleadings in motor vehicle accident litigation particularize allegations of negligence. (344)

R48. The Rules of Civil Procedure should provide that the Statement of Claim set out the damages claimed for both economic and non-economic loss for each plaintiff and a statement as to the nature of the

plaintiff's injuries. The Statement of Defence should briefly set out the defendant's position on both liability and damages. (344-345)

R49. *Trial judges should be given specific authority to impose cost penalties on solicitors making unsupported allegations in pleadings. (345)*

Pre-trials

R50. *All actions should be pre-tried and should not be placed on a trial list until certified as ready by the pre-trial judge or, in the absence of the pre-trial judge, by another judge of the court. (346)*

R51. *In a motor vehicle accident case when damages are in issue, pre-trial documentation should include:*

- *(a) all medical reports of any doctor whose evidence will be tendered at trial either in the form of viva voce evidence or by the filing of a medical report;*
- *(b) any other experts' reports to be relied upon; and*
- *(c) a breakdown of each party's position with respect to all aspects of economic loss. (346)*

R52. *Where possible, the parties themselves should attend the pre-trial, unless the defendant is insured and policy limits are not a relevant issue. (346)*

R53. *Actions should not be set down for pre-trial until counsel setting the action down has specifically certified that discoveries have been completed and the action is ready for trial. The onus should be on counsel to arrange a pre-trial. (366)*

R54. *All Provincial Courts (Civil Division) should assign duty counsel to assist all those who require help at the pre-trial. Duty counsel at the pre-trial should ensure that plaintiffs, in particular, have filed Offers to Settle and that required evidence (such as medical reports) is available. Medical evidence in the Provincial Court (Civil Division) should be in the form of a report unless leave is granted to have a medical practitioner give viva voce evidence. (356-357)*

R55. *The Ministry of the Attorney General's data collection procedures should be expanded, in order to capture data relating to the number and the time consumed by pre-trials as related to the same classification of cases (including motor vehicle cases) on which data are now recorded. (366-367)*

Medical and Other Experts' Reports

F80. **The dominant objectives relating to the production and disclosure of medical and other experts' reports should be to promote fair trials, early settlement and reduce the cost of litigation. (351)**

R56. *Section 52 of the Ontario Evidence Act should be amended to bring within its provisions the reports of all health professionals including dentists,* *chiropractors, psychologists, physiotherapists and rehabilitators. (351)*

R57. *Section 52 of the* Evidence Act *should be amended to require that any party intending to call a doctor or other health professional as a witness be required to produce all reports of that witness. (353)*

R58. *Section 52(2) of the* Evidence Act *should be amended to require explicitly that a party intending to file a medical report produce it to the other side. (353)*

R59. *Section 52(3) of the* Evidence Act *should be amended to provide that doctors who have medically examined any party and doctors who are involved as consultants only, are both subject to the same rules with respect to medical reports and a doctor's right to give* viva voce *evidence at trial. (353)*

R60. *Greater use should be made of Rule 53.02(1). (352)*

R61. *Rule 50.05 of the Rules of Civil Procedure should be amended to require that medical reports and reports of other experts be produced both for the pre-trial judge and other parties seven days before the pre-trial. (352)*

R62. *The trial judge should have the discretion to permit an expert's report to be filed as an exhibit in jury and non-jury trials even if the expert will be called to give* viva voce *testimony at trial.*

Offers to Settle

R63. *The Rules of Civil Procedure should be amended to require a plaintiff to make an offer to settle within 7 to 10 days after a pre-trial. (360)*

R64. *Rule 57.01(1) of the Rules of Civil Procedure should be amended to add as a factor the court may consider on the question of costs, the failure of a successful party to make an offer to settle. (360)*

Trials

F81. The impact of the recommendation of the Ontario Courts Inquiry as to costs in the Provincial Court (Civil Division) is that a 3% savings may be effected. (356)

F82. Motor vehicle accident cases do not consume an inordinate amount of court time because the vast majority are concluded by settlement, not trial. (383)

F83. In particular, over the period 1982-1985:

- (a) The vast majority of all motor vehicle accident claims were resolved without any action being commenced.
- (b) Actions were commenced in less than 50% of bodily injury claims.
- (c) Even when an action was commenced, more than two-thirds of the actions were resolved before the action was set down for trial.

(d) Between 2% and 3% of bodily injury claims went to trial. (364-365)

F84. The number of motor vehicle actions commenced in the Supreme Court of Ontario declined during the period 1982-1985; the number of Supreme Court motor vehicle actions set down for both jury and non-jury trial remained more or less stable in that period. (367)

F85. There has been a significant increase in the number of motor vehicle jury actions in both Supreme and District Courts. The increase in the delivery of a jury notice is most significant in Toronto in both courts but particularly so in Supreme Court motor vehicle cases. (375)

F86. Most jury notices are served by defendants. (375)

F87. There has been a significant reduction in the percentage of Supreme Court motor vehicle non-jury actions tried, a reduction which is likely attributable to the increasing impact of the pre-trial in promoting settlement. (375)

F88. In the District Court a greater percentage of non-jury motor vehicle accident actions went to trial than jury actions. (376)

F89. There has been a significant increase in the percentage of motor vehicle accident cases settled before trial in the Supreme Court in the period 1985-1986 compared to the period 1979-1980. (376)

F90. There was a significant increase in the number of non-jury motor vehicle accident cases settled before trial in the District Court in the period 1985-86 compared to the period 1979-80. (376)

R65. The Rules of Civil Procedure should be amended so as to create two separate lists as follows:

(i) a list of cases set down for pre-trial; and
(ii) a list of cases ready to be tried. (366)

R66. The list of cases ready for pre-trial should consist of cases in which counsel has certified that discoveries have been held and the case is ready to be pre-tried. (366)

R67. The cases-ready-to-be-tried list should consist of pre-tried cases which have been certified as ready for trial by the pre-trial judge. (366)

R68. The Courts of Justice Act should be amended to provide that in jury cases, trial judges have a discretion to express an opinion to the jury as to a range of compensation for both pecuniary and non-pecuniary damages. (354)

R69. Trial judges should give greater consideration to making orders in the form of directions to the Assessment Officer with respect to disbursements for experts in connection with motor vehicle accident litigation. (359)

R70. The Ministry of the Attorney General should examine the cost of civil jury actions and should consider *increasing the fee paid for setting an action down for jury trial. (376-377)*

F. COMPENSATION ISSUES (Chapter 10)

Family Law Claims

F91. The statistical evidence does not suggest excessive costs associated with family law claims, nor does it suggest that the assertion of trivial claims by numerous relatives for damages for guidance, care and companionship is widespread. (390)

F92. Recent statutory procedural changes and decisions of the Ontario Court of Appeal will reduce both the number of family law claimants and amount of awards for loss of guidance, care and companionship. As a result, changes to the F.L.A. cannot be justified on a cost basis. (390-392)

F93. The principles underlying the awarding or compensation for guidance, care and companionship as set forth in the F.L.A. are on balance to be preferred to those underlying the recent recommendation of the Ontario Law Reform Commission. (394-395)

R71. Section 61(2)(e) of the F.L.A., which provides compensation for the loss of guidance, care and companionship, should not be amended. Specifically, the recommendation of the Ontario Law Reform Commission that claims by dependants for loss of guidance, care and companionship be abolished, should not be implemented. (393-394)

Prejudgment Interest

F94. Compensation of the victim should be the main object of prejudgment interest. The interest rate should be neutral. (400)

F95. When the full prejudgment interest rate is awarded on the non-pecuniary damage portion of an award, the plaintiff is overcompensated. (407)

R72. *The Courts of Justice Act should be amended to provide that in the case of both liquidated and unliquidated damages, prejudgment interest on personal injury awards should be calculated from the date the cause of action arose. (401)*

R73. *Prejudgment interest payable in circumstances where SEF 44 underinsured coverage is responding to the claim, should run from the date of loss rather than from the date of notification. (401)*

R74. *Section 138 of the Courts of Justice Act should be amended to permit compound interest calculated at quarterly intervals to be awarded. (402)*

R75. *Section 137(1)(d) of the Courts of Justice Act should be amended to provide that the prejudgment interest rate be the bank rate. Section 137(1)(d) should also provide that the prejudgment interest rate be adjusted quarterly and that a fractional rate be rounded either up or down to the nearest tenth of a point. (402-403)*

R76. *Section 138 of the* *Courts of Justice Act* *should be amended to provide that prejudgment interest on non-pecuniary general damages bear interest at the real rate of return. If a specified rate is used, it should be in the range of 3.5 to 4% with provision for a periodic review by the Rules Committee. (410)*

Discount Rate

R77. *A mechanism should be established to review from time to time, the appropriateness of the discount rate provided for in Rule 53.09 of the Rules of Civil Procedure. (413)*

Gross-Up and Structured Judgments

F96. A structured settlement has certain identifiable advantages over a pure lump sum, future loss payment which is to be invested at a predetermined interest rate. The advantages are most obvious for future care costs in injury cases and pecuniary loss in fatal accident cases. (422-424)

R78. *Section 129 of the* *Courts of Justice Act* *should be amended to provide for mandatory structured judgments at the discretion of the trial judge, for future care costs in injury cases and for pecuniary loss in fatal accident cases. (424)*

R79. *Once the trial judge in the exercise of his discretion imposes a structured judgment, the parties should be given a reasonable but short period of time (for example 14 days) to consult structured settlement consultants or life insurers* *and then make submissions to the trial judge as to the form of the structured judgment. (425)*

R80. *To the extent a gross-up calculation is still required in jury trials, that calculation should be made by the trial judge (rather than the jury), after the jury has made findings of fact as to compensation which would attract gross-up. (425)*

R81. *If a gross-up calculation is still required, a subcommittee of the Rules Committee should be established to develop a uniform method for the gross-up calculation to be used in all relevant cases. (425-426)*

Collateral Source Rule

F97. Inquiry claims survey data demonstrate that those injured in motor vehicle accidents who have collateral sources of income are receiving 56% more than their tort law-based wage loss entitlement. This results in aggregate overcompensation among all injured in motor vehicle accidents of 17%. (433)

F98. It is reasonable to conclude that abolition of the collateral source rule would have an uncertain but demonstrable effect in reducing claims frequency.

F99. The collateral source rule as presently applied in Ontario is wasteful in practice and cannot be justified in principle. (438)

F100. The continuation of the collateral source rule cannot be justified on deterrence grounds.

F101. Many sources of collateral payments do not exercise subrogation rights. (439)

F102. For cost and public relations-related reasons it is unlikely that subrogation rights will be exercised and it is therefore inappropriate to develop a model for eliminating overcompensation caused by the collateral source rule that is premised on subrogation. (439)

R82. The Government of Ontario should enact legislation which provides:

- *(a) that the collateral source rule be abolished;*
- *(b) that where an injured person receives collateral benefits in the nature of indemnity payments from either public or private sources, the amount of such payments (subject to income tax where appropriate) be deducted from the relevant components of a tort award made to the injured person so that there will be no overcompensation. (442-443)*

R83. Taxable collateral source payments should be deducted net of tax. A flat 20% tax factor should be applied to reduce the collateral source offset. (443-444)

R84. Loss of future income should be established and paid without collateral source offset but the claimant should be required to hold future collateral source payments in trust for the third party insurer net of tax where applicable. (444)

R85. Both the Government of Ontario and the Government of Canada should conduct a review of their *respective programs which provide income assistance in the event of an accident in order to determine:*

(a) the amount of monies paid to persons injured as a result of motor vehicle accidents; and

(b) the extent to which rights of subrogation in respect of these payments are being exercised or are feasible. (443)

G. RECOMMENDED SYSTEM OF COMPENSATION (Chapter 12)

F103. Because automobile insurance is compulsory, it must be made available at a price consistent with sound insurance principles. (513)

F104. Alternative compensation systems should be assessed against the following reasonable evaluation criteria: compensation, rehabilitation, cost efficiency, incentive/deterrence, fairness, insurance considerations, constitutionality. (515-517)

F105. A comprehensive compensation plan for those injured by accident or for the disabled is not a viable option, but the design of a compensation scheme for motor vehicle accidents should take into account the prospect of the eventual development of a comprehensive compensation plan. (517)

F106. From the standpoint of the compensation criterion, pure no fault and threshold no fault are superior to the tort system. (519)

F107. Rehabilitation is an essential objective of any compensation system and it cannot be realistically achieved through the tort system. Because no fault compensation is delivered on a first party basis and because rehabilitation benefits must be made available without undue delay, the rehabilitation criterion is better served by no fault than by tort law. (520-521)

F108. Transaction costs can be reduced in a pure no fault plan. The reduction will likely be in the area of 5% of earned premiums. To that extent, pure no fault is more efficient than the current third party compensation system. It is doubtful there would be any significant reduction in transaction costs in threshold no fault. There is, hence, no cost efficiency basis on which to proceed to threshold no fault. (528)

F109. In a no fault system, if premiums are not to be increased, the funding for increased first party benefits can only be obtained by systematically reducing or eliminating existing rights to non-pecuniary compensation. (530)

F110. The tort system still performs some modest deterrent function in the motor vehicle context, even if its impact is not empirically demonstrable. (540)

F111. Even if the concepts of fault and responsibility exert no positive deterrence influence the introduction of a no fault compensation plan may well have a modest adverse effect on driver care. (542)

F112. The introduction of no fault in Quebec did have some unquantifiable impact on the Quebec motor vehicle accident rate, but the no fault impact was small compared to the impact of compulsory insurance and flat premium rating. (538)

F113. Tort law's capacity for fairness and justice should not be ignored. The moral neutrality of some motor vehicle accidents cannot withstand even anecdotal analysis. The public's expectations and sense of fairness would be offended if the more seriously injured were not permitted to have access to compensation for both economic and non-economic loss assessed on an individual case-by-case basis. The public's sense of fairness will not be satisfied if fault is left to be dealt with solely through the criminal justice system and the premium rating system. (545-549)

F114. The insurance industry's flexibility is more than sufficient to deliver benefits and compensation in any reasonable compensation scheme. (550)

F115. The threshold proposed by the I.B.C. in its submission to the Inquiry is inappropriate.

F116. A prevailing shortcoming of the insurance industry at the claims level is in the delivery of first party benefits. It is unrealistic to conclude that upon conversion to a form of no fault compensation plan, claims-related dealings between insurer and insured will be substantially improved. (561)

F117. Establishing a no fault automobile insurance compensation scheme as a first step to a more comprehensive no fault compensation plan may make it less likely, not more likely, that a more comprehensive compensation plan could eventually be implemented. (564-565)

F118. The efficiency assumptions made by the Ontario Task Force on Insurance are in error. A no fault system in which policies are sold on an individual basis cannot return 80¢ to 90¢ of the premium dollar to claimants. (565)

F119. A motor vehicle accident compensation system should deal humanely with all those who are injured and provide reasonably generous rehabilitation and long-term care benefits on a no fault basis, while at the same time preserving a compensation distinction between those who cause accidents and those who do not. (567)

F120. Threshold no fault should be rejected because it is relatively inefficient and unnecessarily arbitrary. There will either be no or minimal savings on transaction costs in threshold no fault. (567)

F121. Pure no fault should be rejected on fairness and deterrence grounds and because it is manifest that few seem to want it. While there are clear benefits to pure no fault compensation from a cost efficiency standpoint, appropriate social policy cannot be judged solely on a cost basis. (568)

F122. While continued use of the tort system on its own cannot be justified on compensation grounds, this does not require abandonment of the tort system.

F123. There is no valid reason why the provision of humane no fault benefits and tort law cannot co-exist. The preservation of fault-based access to individualized compensation accords with the public's sense of what is right and, in a modest way, may achieve some deterrence benefits. The criticism of the tort system on compensation grounds is answered by the availability of fair and comprehensive no fault benefits. (568-569)

F124. The legitimacy of the co-existence of no fault and tort requires first that there be a substantial expansion of the quantum of no fault benefits and the eligibility criteria for these benefits; and second, that the compensation plan be capable of being delivered through the automobile insurance system at a reasonable cost. (569)

F125. The quantum of the no fault income replacement benefit must be increased to provide economic stability for those injured in motor vehicle accidents; it is, however, inappropriate to establish an inordinately high income replacement benefit bearing in mind that it is compulsory for Ontario's drivers to buy this coverage. (574)

F126. Those injured in motor vehicle accidents should not have access to no fault benefits significantly higher or lower than the benefits available to those injured in the workplace. (575)

F127. A seven-day waiting period before the receipt of no fault benefits will eliminate the incentive to stay off work now built into the system and will also reduce transaction costs for short-term cases.

F128. The death benefit should not be linked to the deceased's income, but should rather provide some reasonable short-term financial assistance to survivors, responsive to the simple recognition of the value of life. The death benefit should be modest, but not insignificant. (580)

F129. If the proposed changes are implemented, Ontario's motorists will be the beneficiaries of substantially increased no fault benefits at moderately reduced cost and without the collateral sacrifice of any right to individual compensation under tort law. Total cost savings should be approximately $65 million. Overall, the proposed changes will result in an estimated loss cost decrease of $12.52 per car. The estimated cost reduction will also have a ripple effect which will serve to further reduce costs and premiums. Premium decreases should at least equal cost savings. (585-587)

F130. The calculation of income loss, particularly past income loss, on a pre-tax basis should be considered. If past income loss were dealt with on an after-tax basis, cost savings would be about $6 per car. If future income loss were dealt with on an after-tax basis, there would be further cost savings of about $4 per car. If all income loss were assessed on an after-tax basis, the abolition of the collateral source rule would result in a further savings of approximately $7 per car. (589)

F131. The proposed changes will result in a per motorcycle cost increase of approximately $31 with subrogation and $85 without subrogation. (590)

F132. The proposed changes will result in a cost savings of approximately $24 per commercial vehicle (ordinary truck). (593)

F133. On any reasonable cost benefit analysis, truly small cases do not fare well in the tort system. A fair threshold should focus on cases that legitimately involve injury and disability of a minor nature. Rather than denying the less seriously injured any compensation for pain and suffering and loss of enjoyment of life, the entitlement to non-pecuniary general damages of the less seriously injured should be limited or capped. (597-598)

R86. A comprehensive compensation plan for accidental injuries or beyond that, a universal disability program should be given further consideration at the federal and provincial levels. (517-518)

No Fault Benefits (Accident Benefits)

R87. The standard form of automobile insurance policy should be expanded to provide no fault accident benefits without exclusions related to driving conduct. (570)

R88. The rehabilitation benefit should be increased from $25,000 to $500,000 per claim. The time limit should be increased from 4 years to 10 years, or 20 years less the victim's age, whichever is longer. (571)

R89. Rehabilitation should be expansively and clearly defined so as to remove doubt as to the first party insurers' obligation to fund physical and vocational rehabilitation. (571)

R90. Rehabilitation should be paid for at the first party level, not on an expense-incurred-only basis, *but rather by giving the claimant, the claimant's medical advisors and the claimant's medical rehabilitation counsellors the benefit of the doubt. (572)*

R91. *Long-term care should be separated from rehabilitation and fixed at $500,000. The family of the injured person should not be excluded from long-term care compensation entitlement. Long-term care benefits should be no greater than the monthly cost of group residence which might reasonably accommodate the insured's needs having in mind the nature of the injuries and any other relevant factors. (573)*

R92. *The disability benefit for the employed should be based upon 80% of the claimant's gross income and should be increased from $140 per week to a maximum of $450 per week. Except for U.I.C. benefits, disability benefits should be non-primary. (574-575)*

R93. *Disability benefits for the employed should not be paid for the first seven days. (576)*

R94. *Disability benefits for the employed should extend for life. (576)*

R95. *Eligibility for disability benefits for the deemed to be employed should commence at age 16 not age 18, and terminate at age 65. The deemed to be employed disability benefit should be subject to a 60-day waiting period. (577-578)*

R96. *Once eligible for disability benefits, an insured* *deemed to be employed should be entitled to the same benefit as the employed. (578)*

R97. *A student should receive no fault compensation as follows:*

- *(a) if in elementary school, $1,000 for each school year lost;*
- *(b) if in secondary school, $2,000 for each school year lost;*
- *(c) if in college or university, $4,000 for each year of education lost to a cumulative maximum of three years or, if a semester is lost, the appropriate part of $4,000 according to the university's semester system;*
- *(d) $340 per week at age 19 if disabled and not attending school. (579-580)*

R98. *The death benefit should be increased to $25,000 for the death of the head of the household or the death of the spouse of the head of the household. An additional $10,000 should be paid for each dependant of the head of the household or spouse. (581)*

R99. *The funeral benefit should be increased to $3,000. (581)*

R100. *There should be a home care benefit in the amount of $50 per week maximum payable on a reasonable expense incurred basis. There should be a seven-day waiting period for this benefit. The standard of disability should be the same as for regular disability benefits. (582)*

R101. *There should be a child care benefit in the amount* *of $200 per week. An additional $50 per child or dependant per week should be payable to a maximum of $350 per week. The benefit should be paid for two weeks without presentation of receipts and thereafter in response to reasonable and proven expenses to the maximum. There should be no family member exclusion. The standard of disability should be the same as for regular disability benefits. (582)*

R102. All accident benefits other than the death benefit should be indexed once a year to the annual Consumer Price Index subject to a cumulative maximum of twice the stipulated benefit. (593)

Related Matters

R103. Because the expanded no fault benefits will provide a relatively severe premium problem for motorcycles, subrogation for motorcycles should be permitted. (590)

R104. Accident benefit claims forms should be common to all licensed insurers. The forms should be simplified and colour coded so that one form is not confused with another. (594)

R105. Those in hospital for more than seven days should be paid the first two weeks of accident benefits entitlement without a medical report unless there are circumstances which clearly and unequivocally suggest that payment is inappropriate. (594)

R106. Adjusters should be given specific disability benefit authority in the amount of $2,000. (594)

R107. *Claimants should pay for the cost of obtaining reasonably required disability benefit medical report forms for the first three months of disability and thereafter the cost of these short medical reports should be borne by the insurer. (594)*

R108. *Insurers and the medical profession should try to reach an agreement on an acceptable fair fee for disability benefit medical reports; alternatively a reasonable fee should be built into the O.H.I.P. fee schedule. (594-595)*

R109. *Section B forms should be delivered immediately to the injured insured if the insured is in hospital and mailed or delivered to the insured if the insured is not in hospital. The onus of delivery of the required forms should be on the insurer. Hospitals (particularly emergency wards) should be provided with no fault medical forms and if practicable the other forms as well. (595)*

R110. *Efforts should be made to coordinate the automobile insurance no fault forms with those of Workers' Compensation, U.I.C., Canada Pension Plan and long-term disability carriers. (595)*

R111. *The Insurance Act should be amended to provide the insured's physician or the insured's treating chiropractor with the required authority to complete the disability benefit medical form and remit it to the insured's insurer. (595)*

R112. *The calculation of the disability benefit should be made available to the insured. (596)*

R113. *The 30-day return to work provision contained in the automobile insurance policy should be increased to 90 days. (596)*

R114. *Disability benefits should be paid within 15 days of the insurer's receipt of the required forms. (596)*

R115. *If a form of no fault compensation plan is desired, consideration should be given to a modified threshold plan in which non-pecuniary general damages in less serious cases (as defined by a moderate verbal threshold) are capped with the result that in those less serious cases which do not meet the defined threshold, non-pecuniary general damages will be limited to a maximum of $3,000. (598)*

H. OTHER INSURANCE AND CONSUMER ISSUES (Chapter 13)

Catastrophic Claims Fund

R116. *There is no need to establish a Catastrophic Claims Fund in Ontario. (601)*

Consumer Information

R117. *Typical premiums or premiums set by the Board should be publicized and explained. (602)*

R118. *Consumers should have access to claims information including:*

- *(a) the insured's entitlement to no fault benefits and the quantum of those benefits;*
- *(b) procedures to be followed in asserting third party claims;*

(c) the availability of dispute resolution mechanisms;

(d) the availability of social programmes which might be of relevance to a person injured in a motor vehicle accident;

(e) the consumer's right to challenge legal fees through the assessment process in those cases where an insured has retained a lawyer;

(f) particulars of any relevant limitation periods. (603)

R119. The provision of information to consumers should be dealt with through the office of the Superintendent of Insurance. The Superintendent's office should be expanded to accommodate the required dissemination of information. (603)

Claims and Underwriting Practices

R120. The Ontario Government should enact unfair claims practices legislation. Claims standards which should be the subject of regulation include:

(a) an injured insured should be provided with all required no fault documentation within seven days of the accident;

(b) no fault benefits should be paid within 15 days of the insurer's receipt of required documentation;

(c) no fault claims forms should include instructions as to processing the claim and the telephone number of a named insurance company representative;

(d) if an insurer is reasonably required to continue investigating a claim beyond the 15-day period, where practicable the insurer

should notify its insured of that fact and provide information as to the expected date when the investigation will be completed;

(e) *if a claim is denied on the basis of a specific policy provision, condition or exclusion, the insurer should be required to give specific information as to the provision, condition or exclusion being relied upon;*

(f) *payment of any first party benefits should be accompanied by an explanation of what the payment is for;*

(g) *no insurer should be permitted to refuse to pay all or part of any first or third party claim where there is no reasonable good faith dispute as to the insured's or the claimant's entitlement;*

(h) *no insurer should require an insured or claimant to sign a release extending beyond the subject matter giving rise to the claim payment;*

(i) *if a first party claim is denied on the basis of a medical opinion secured by the insurer, the insurer should be given a copy of the medical report. Insurers should be prohibited from denying first party claims based on verbal medical reports;*

(j) *an insurer requiring a medical examination of an insured should be required to continue first party benefit payments pending the completion of the medical examination and the insurer's receipt of a medical report;*

(k) *insurers should be obliged to fund reasonable rehabilitation if there is credible medical evidence and in appropriate circumstances the evidence of a rehabilitation consultant supporting the proposed rehabilitation. If an* *insured refuses to undertake or continue rehabilitation that has been recommended by his own medical advisor or the insurer's medical advisor, the insurer's obligation to pay disability benefits should continue until the issue has been dealt with through dispute resolution. (604-607)*

R121. The Superintendent of Insurance should be given power to adopt rules to ensure the prompt, fair and honest processing of claims and complaints. (607)

R122. Insurers should face the prospect of reasonable financial penalties to a maximum of $10,000 for unacceptable claims and underwriting practices. Hearings dealing with any alleged unfair claims or underwriting practice should be conducted by the Superintendent of Insurance or the Superintendent's nominee. The hearings should be relatively informal and subject to appeal only by way of judicial review. (607)

R123. An insured who has received delayed or no payment of a first party benefit entitlement should be then entitled to interest at twice the prime rate. (607)

R124. The Superintendent of Insurance should have jurisdiction to respond to proved underwriting abuses and to impose appropriate penalties. (608)

Dispute Resolution

R125. As a first step to resolving disputes concerning accident benefits, the I.B.C.'s review committee proposal should be accepted. Every insurer should designate one representative to be responsible for *review of no fault benefit payment decisions. The review committee decision will be binding on the insurer but not the insured. (609)*

R126. *In the event an insured is dissatisfied with the decision of a review committee the insured should have access to arbitration or the courts by a* *de novo* *hearing. (604)*

R127. *The Bar and the insurance industry after joint consultation should establish a regionalized roster of acceptable arbitrators in order to deal with first party automobile insurance policy disputes. (609)*

R128. *Serious consideration ought to be given to establishing an arbitration division within the court structure. (610)*

Uninsured Drivers

R129. *The fine for driving without insurance coverage should be increased. Anyone convicted of driving without insurance should be exposed to an automatic licence suspension in addition to a fine. Driving privileges should not be restored until the offender has filed proof of financial responsibility. (612)*

Information Systems

R130. *The Ministry of Transportation and Communications should act immediately to transfer driver records to computer. The information should be available on-line to any licensed Ontario automobile insurer for a yearly fee based on market share. (615)*

R131. A cooperative information network should be established between the Registrar of Motor Vehicles and licensed Ontario automobile insurers to permit the immediate verification of automobile insurance coverage. (615-616)

R132. All licensed Ontario automobile insurers should be required to be part of an information system and therefore should be required to submit claims histories of their insureds to the database; all insurers should have access to that information. (616)

I. CONSTITUTIONAL CONSIDERATIONS (Chapter 14)

F134. The province, by virtue of section 92(13) of the Constitution Act, 1867 has legislative authority to create, modify or abrogate causes of action in tort; equally a province has legislative authority in relation to automobile insurance and the authority to enact a no fault compensation plan. (619)

F135. The administration of a no fault motor vehicle accident plan by an administrative agency rather than the courts does not offend section 96 of the Constitution Act. (619)

F136. Replacing the right to sue in tort with a no fault plan does not infringe section 7 of the Canadian Charter of Rights and Freedoms. (621-623)

F137. An automobile no fault plan does not infringe section 15 of the Charter. (630-631)

F138. Threshold schemes are constitutionally more vulnerable than pure no fault schemes but a reasonable threshold scheme would on balance not infringe section 15 of the Charter. (639)

F139. Even if a no fault or threshold scheme infringed either section 7 or section 15 of the Charter they would be justified under section 1 of the Charter. (640-641)

F140. While the use of age 65 as a cut-off point for eligibility for no fault automobile disability benefits may be vulnerable to a challenge under section 15 of the Charter, it would likely be justified under section 1. (642)

F141. It would not offend section 15 of the Charter to distinguish between those actively employed and those deemed to be employed by providing an age 65 termination date for disability benefit eligibility for the latter. (643)

F142. The age 18 commencement date for those deemed to be employed likely infringes section 15 of the Charter and cannot be justified under section 1. (643)

F143. The use of age as a premium rating variable is more likely to survive a Charter challenge than the use of sex. (648)

R133. Further consideration ought to be given to the extent to which neutral classification factors can be developed which are accurate substitutes for age or sex. (650)

J. PUBLIC OR PRIVATE DELIVERY OF AUTOMOBILE INSURANCE (Chapter 15)

F144. Interprovincial premium comparisons are at best unhelpful and at worst misleading in assessing the comparative cost efficiency of public and private delivery systems. (671)

F145. The simple classification systems used in the public plans result in extensive cross-subsidization of high risk drivers by low risk drivers. (667)

F146. Cross-subsidization does not occur in Ontario's private sector competitive delivery system except in the residual market (the Facility Association). (666)

F147. A decision to nationalize Ontario's automobile insurance industry would have the following potential consequences:

(a) There would be very significant financial and organizational implementation requirements.

(b) Some of those now employed in the insurance industry would lose their jobs; to retain their jobs, others would have to relocate.

(c) Excluding the private sector from all or virtually all of the Ontario market may limit industry involvement in the remainder of the Canadian automobile insurance market and may create a shortfall in capacity in general insurance lines. (672-674)

F148. A public monopoly insurer will not achieve any efficiency gains attributable to economies of scale compared to major Ontario insurers. (677)

F149. Public monopoly automobile insurance has the potential to achieve cost savings when compared to a competitive automobile insurance industry in the private sector. The most important cost savings is lower business acquisition costs (mainly broker commissions); a less significant cost savings results from the probable use of a simplified classification system, or in the extreme as in Quebec and Saskatchewan, no classification system. These potential cost advantages depend not on the difference between public and private delivery, but on the difference between monopoly and competitive delivery. (683-684)

F150. The maximum potential cost savings that could be achieved by a public monopoly insurer is approximately 7% which translates into a premium reduction of about $43 per car. (687)

F151. If a simplified (or no) classification system is adopted, the impact of the aggregate cost savings will affect different insureds differently. The beneficiaries of the premium reduction will be Ontario's high risk drivers. Because of the change in the classification system, over 40% of Ontario's drivers who are now classified as low risk drivers will face premium increases on conversion to public automobile insurance. If a public monopoly insurer were to use a more complex classification system, potential cost savings would be reduced. (687-688)

F152. The start-up costs of a public automobile insurance corporation, the elimination of the benefits of competition and the likely increase in the number of high risk drivers (and therefore claims costs) will reduce, if not eliminate entirely, the potential for cost savings from conversion to public automobile insurance. (688-690)

F153. Freedom of choice and the benefits of competition are undeniable advantages of Ontario's private sector delivery system. (692)

F154. Cross-subsidization of high risk drivers by low risk drivers that is characteristic of the public plans is neither fair nor equitable. (692-693)

F155. The ability to integrate licensing and insurance requirements is an advantage of public automobile insurance. (697)

F156. The interest in and opportunities for the promotion of traffic safety are likely to be greater in a public than a private delivery system. Nevertheless, the government's interest in traffic safety and its commitment to accident prevention should not depend upon whether it is responsible for the automobile insurance system. (699)

F157. Automobile repair costs are lower in a private system than in a public system. (699-700)

F158. The fact that public plans pay no corporate income tax means that the loss of corporate tax revenues will result in higher taxes in other areas. This is an indirect subsidy. (700)

F159. There is no justification for a policy on the part of a public insurer to invest within the province; over 70% of one public insurer's (I.C.B.C.) investments are out of the province. (700-701)

F160. There is no evidence to suggest that the consumers in the public plans are more or less satisfied than consumers in Ontario. This is particularly evident now that consumers in the public plans are faced with substantial premium increases. (701)

F161. Ontario taxpayers and drivers would not benefit from the conversion to public automobile insurance. The modest potential for cost savings particularly in the area of business acquisition costs would be offset in the short run by the substantial start-up costs of a public plan and would be completely eroded in the longer term by other cost-based considerations, particularly the elimination of the potential for lower premiums derived from competition. (708-709)

F162. There are no compelling social benefits or other non-economic justifications which support the case for public automobile insurance. An assessment of factors unrelated to cost efficiency reinforces the case against public monopoly. (709)

R134. The Government of Ontario should not introduce public automobile insurance. (709)

K. RATE REGULATION (Chapter 16)

F163. Some form of rate regulation, that is, some outside review of insurers' premiums is socially, if not economically, desirable. The public is entitled to some external protection against unreasonable or unjust premiums; at the same time, rate regulation should bring a measure of stability to the market. (720-721)

F164. The structure of the automobile insurance market in Ontario is consistent with a highly competitive industry. The large number of firms in the industry and their relative size distribution make collusion or cartel-like behaviour unlikely. (727)

F165. The conclusion that the automobile insurance industry in Ontario is competitive must be qualified in three respects:

- (a) The broker and agent distribution system fragments the competitive market.
- (b) In some particular markets (for example taxis), the competition is quite limited.
- (c) The residual market, the Facility Association, is non-competitive. (727-728)

F166. The two dominant objectives of rate regulation should be premium fairness as assessed against sound insurance principles and market stability which will enure to the eventual benefit of the public. Appropriate rate regulation should provide a cost efficient mechanism for ensuring that premiums charged by individual insurers are fair and for ensuring market stability. (728-729)

F167. The proposed rate regulation legislation will inhibit insurers from being innovative in their rating procedures. (729)

F168. The public utility model of regulation, upon which the proposed rate regulation legislation is based, is inappropriate to a competitive industry even if the product is compulsory. (731)

F169. Industry-wide hearings will produce rates or ranges of rates that in many instances are higher than those that might be generated by competitive pricing with the result that the public will be denied the benefits of true competition. On a more specific level consumers will be denied the benefit of lower than benchmark rates which would be charged by the more efficient insurers in a truly competitive market. (731-732)

F170. The form of the process contemplated by the proposed rate regulation legislation will result in increased costs which will inevitably be passed on to consumers. The substance of the process will deny consumers access to the lower premiums generated by the more efficient insurers in a competitive market. (733)

F171. Without the provision of funding, public participation at industry-wide hearings cannot be meaningful. (734)

F172. The premiums in the Facility Association are lower than the expected loss costs of those who populate the Facility Association suggest they should be, inevitably resulting in a measure of cross-subsidization. Thus, approval of Facility Association rates will involve substantial social policy considerations. (735-736)

R135. *The Government of Ontario should enact rate regulation legislation. The legislation should provide for the establishment of an independent board to review and approve the rates of individual insurers. (720-721)*

R136. *The Government of Ontario should not enact the proposed Ontario Automobile Insurance Board Act, 1987 in its present form. Specifically, the Board should not have the power to set rates. The Board's power should be limited to rate approval. (731-732)*

R137. *Whatever rate approval process is adopted, it should be one which will not unduly inhibit competition. (734)*

R138. *The Board should have the express power to approve deviated rates even where refinements to the classification system are involved, provided that the rates are otherwise just, reasonable and sound in principle. (729-730)*

R139. *Alternatively, the Board should have direct jurisdiction over the classification system and an unfettered power to modify it. (729-730)*

R140. To the extent the legislation permits public participation at Board hearings, the Government should make available reasonable funding in order to ensure that public participation is meaningful. (734)

R141. For clean risks the former Facility ceding arrangements should be put in place. This ceding should occur at an insurer's book premiums unless the insurer's premiums are below the range of rates set by the Board. (736-737)

R142. The Superintendent of Insurance should be permitted to participate in the Facility Association premium approval process, in order to ensure that the public interest is represented. (737-738)

L. MOTOR VEHICLE ACCIDENT PREVENTION (Chapter 17)

F172. Those killed in motor vehicle accidents tend to be young, healthy and male. Motor vehicle accidents are the leading cause of death for males between the ages of 15 and 24. (740)

F173. In 1985 dollars, economic loss resulting from Ontario motor vehicle accidents is approximately $1.7 billion. (742)

F174. The reduction in speed limits has worked to reduce accident frequency and severity; mandatory seat belt legislation has worked to reduce accident severity. (760-761)

R143. Responsibility for traffic safety should be reposed in one government department or independent agency. (752-753)

R144. Speed variation increases the risk of accidents and should be controlled. Both minimum and maximum speed limits should be enforced. (760)

R145. Parents charged with failing to use child restraints in motor vehicles should be given the choice of paying the fine or establishing to the court that a child restraint has been purchased, rented or borrowed. (762)

R146. The legal age for drinking and the legal age for driving should be given further study. (767)

R147. Driver education should be taught at a much younger age than 15; it should be taught as part of a course in acceptable social behaviour and not as part of a crash course leading to the acquisition of a driver's licence. (767)

CHAPTER 2

INTRODUCTION

This Inquiry is the fourth major study in Ontario within the past 15 years in which the compensation of those injured in motor vehicle accidents has been considered. The earlier studies to which I refer are the 1973 Ontario Law Reform Commission Report on Motor Vehicle Accident Compensation; the 1977, 1978 and 1979 Reports of the Select Committee on Company Law in which automobile insurance and compensation-related issues were considered, and the 1986 Ontario Task Force on Insurance, which considered problems in the property/casualty insurance industry in Ontario in response to what has become known as "the liability insurance crisis" of 1985-86.

Although the Ontario Task Force on Insurance regarded problems in automobile insurance as being separate from the root causes of the liability insurance crisis, the Task Force recommended a pure no fault compensation scheme for those injured in motor vehicle accidents. As the Task Force clearly owed its existence to the liability insurance crisis and, as this Inquiry owes its existence to the recommendation of no fault automobile insurance by the Ontario Task Force on Insurance, I think it can be said that the liability insurance crisis of 1985-86, at least indirectly, led to this Inquiry.

I will return to the report of the Ontario Task Force on Insurance after briefly considering the 1973 Report of the Ontario Law Reform Commission and the 1977, 1978 and 1979 Reports of the Select Committee on Company Law.

A. THE ONTARIO LAW REFORM COMMISSION 1973 REPORT

The Ontario Law Reform Commission's (O.L.R.C.) examination of automobile accident compensation and the tort system extended over a six year period. In its 1973 Report, the O.L.R.C. recommended replacing the tort system with a no fault system of compensation.[1]

The O.L.R.C. was impressed by the rationality of New Zealand's comprehensive accident compensation scheme. Uncompensated automobile accident victims, delay, cost and uncertainty, particularly in the determination of fault, were all matters which led the O.L.R.C. to the conclusion that tort had outlived its usefulness as a system of motor vehicle accident compensation. The Commission's 1973 Report emphasized the excessive consumption of court time by motor vehicle accident cases (said by the O.L.R.C. to be 40%)[2] and the undermining of the traditional notion of fault by liability insurance. The O.L.R.C. concluded that the tort system had no meaningful capacity for deterrence.[3] In dealing with the deterrence issue, the Commission referred to, and accepted, this statement from a Report of the New York State Insurance Department:

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[1] Ontario Law Reform Commission, Report on Motor Vehicle Accident Compensation (Toronto: The Commission, 1973). [Henceforth: O.L.R.C., Report (1973)].

[2] O.L.R.C., Report (1973), p. 15.

[3] O.L.R.C., Report (1973), p. 18.

> Individual, last moment driver mistakes--undeterred by fear of death, injury, imprisonment, fine or loss of licence--surely cannot be deterred by fear of civil liability against which one is insured. Indeed, as a matter of logic, the contrary is true.[4]

This statement was also referred to in the 1986 Ontario Task Force on Insurance Report[5] about which more will be said shortly.

In dealing with the no fault benefits in the Ontario standard form of automobile insurance policy, the O.L.R.C. rejected the concept of an "add on system" in which no fault benefits are available in addition to tort rights and credit is given in the third party action for no fault benefits paid or available. The O.L.R.C. also concluded that losses occasioned by motoring should be internalized and that double recovery should be eliminated.[6] The O.L.R.C.'s view was that no fault benefits should be "primary".[7] This issue involves consideration of both cost and fundamental policy objectives. It is clear that the conclusion that no fault benefits should be primary was based on policy grounds as the O.L.R.C. did not calculate the cost of this or other recommendations.

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[4] New York State Insurance Department, Automobile Insurance. . . For Whose Benefit?, A Report to Governor Nelson A. Rockefeller (New York: The Department, 1970), p. 12.

[5] Ontario Task Force on Insurance, Final Report (Toronto: Ministry of Financial Institutions, 1986). [Henceforth, Ontario Task Force on Insurance, Final Report (1986)].

[6] The Commission recognized that this change would have to be made by legislation because of the Ontario Court of Appeal decision in Boarelli v. Flannigan, [1973] 3 O.R. 69 (C.A.).

[7] Primary benefits are those paid regardless of other benefits to which the insured may be entitled. Primary benefits may be contracted to non-primary or secondary benefits which are paid only after other benefits to which the insured may be entitled have been taken into account. Ontario's existing no fault benefits contained in Section B of the automobile policy are not primary.

Although the O.L.R.C. advocated a pure no fault automobile accident compensation scheme, the recommendation was conceptually encumbered by the Commission's view that the no fault system should be a "first step" to the adoption of a comprehensive accident compensation scheme; the O.L.R.C. envisaged this as similar to the proposed New Zealand system, a universal publicly-run accident compensation scheme adopted in 1974.

The O.L.R.C. Report was criticized for recommending "sweeping changes" without reasonable consultation, and for relying on stale and inapplicable statistics. The O.L.R.C. was also accused of having failed to commission research of its own. It relied on earlier studies done in Michigan, Washington, England, British Columbia and Ontario. The Ontario study was done by Osgoode Hall Law School in 1961. Its author, Professor Allen Linden (now Mr. Justice Linden and President of the Law Reform Commission of Canada), in a subsequent paper, criticized the O.L.R.C. Report, stating that "...data collected in 1961 should not be relied upon to evaluate the auto insurance system of 1975."[8]

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[8] Allen M. Linden, "Faulty No-Fault: A Critique of the Ontario Law Reform Commission Report on Motor Vehicle Accident Compensation," Osgoode Hall L. J. 13, no. 2 (1975): 452.

Mr. Justice Linden emphasized that the O.L.R.C.'s proposal for a sweeping change to pure no fault was not costed; the Commission did not consider what the impact of its suggested changes on automobile insurance premiums would be. He was also critical of the O.L.R.C.'s assessment of the objectives of the tort system. He conceded that if the only purpose of the tort system was to provide compensation, as emphasized by the O.L.R.C., it could be justifiably discarded. It was, and is, Mr. Justice Linden's view that the tort system plays a role far beyond compensation. Another criticism of the O.L.R.C. Report was based on the premise that although data collected in 1961 could be relevant to the circumstances of the mid-1970s, there were a number of intervening changes in Ontario motor vehicle insurance and compensation law which made that data less significant in its weight. These changes included the institution of compulsory no fault benefits in 1972, the evolution of Ontario automobile accident-related negligence law and social welfare legislation.

B. THE SELECT COMMITTEE ON COMPANY LAW REPORTS, 1977, 1978 AND 1979

The O.L.R.C. Report stimulated interest in no fault compensation schemes, but did not elicit a legislative response to its no fault proposal. On May 25, 1976, the Select Committee on Company Law (a committee of the Ontario Legislature) was reconstituted to inquire into "...the business of insurance companies ...". The Committee's mandate included an obligation to review all aspects of automobile insurance. The Committee's Reports are thorough and comprehensive and many of its recommendations became part of Ontario's automobile insurance compensation law. I do not propose to review the details of all of the Committee's recommendations, given my intention to refer to these more recent automobile accident compensation studies for background purposes only.

The Committee's first Report was submitted in 1977.[9] Among many other things, it recommended an increase in the existing no fault benefits, which by 1972 were part of Ontario's compulsory automobile insurance package. The recommendation was to increase the maximum weekly disability benefit (earnings replacement) from $70 to $140. The Legislature accepted this recommendation in 1978. Disability benefits have not increased since that time. Other no fault benefits (death, funeral, replacement services) were also increased in response to the Committee's recommendations.

The Committee's 1977 Report dealt with no fault automobile accident compensation in a chapter entitled: "Topics for Subsequent Consideration".[10] The Committee resolved to consider further a no fault compensation scheme, having in mind "the problems" in the areas of bodily injury and property compensation, and the issues of no fault's impact on premiums, reparations, the courts and other parts of the automobile insurance system. This further consideration was made by a reconstituted

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[9] Ontario. Legislative Assembly. Select Committee on Company Law, The Insurance Industry: First Report on Automobile Insurance (Toronto: Legislative Assembly, 1977). [Henceforth: Select Committee on Company Law, First Report (1977)].

[10] Select Committee on Company Law, First Report (1977), p. 241.

Committee whose 1978 Report[11] contained recommendations on compensation for those suffering injury and loss as a result of automobile accidents.

The Committee heard 80 witnesses, including 40 in out of province sessions. The Committee's investigation into no fault included a consideration of "Variplan" (the insurance industry's no fault proposal of the 1970s). In its 1978 Report, the Committee recommended a threshold no fault system for compensating those injured in automobile accidents. The Committee dealt with the issue of premiums in its proposed no fault regime with obvious caution. The Committee concluded that the "...introduction of no fault compensation is unlikely to effect a reduction in total automobile insurance costs..." but that no fault could compensate "...the average injured person for substantially the full extent of his economic losses without effecting any significant increase in total automobile insurance costs".[12] It is apparent that certainty, promptness and efficiency were prominent objectives of the Committee's no fault recommendations.

Although the Committee was impressed with the concept of a pure no fault system,[13] it seems to have been concerned about "...an expectation among the insured public of compensation for categories of loss such as pain and suffering ...".[14] The Committee responded by recommending that there be a no fault provision for non-economic loss (to be paid by the first party insurer);[15] the quantum of that non-economic loss was to be scheduled to "...provide an exact amount for each type of injury."[16]

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[11] Ontario. Legislative Assembly. Select Committee on Company Law, The Insurance Industry: Second Report on Automobile Insurance (Toronto: Legislative Assembly, 1978).

[12] Select Committee on Company Law, Second Report (1978), p. 162.

[13] For purposes of simplistic analysis, pure no fault can be regarded as a compensation system in which the third party right to sue based on fault is eliminated completely. In pure no fault, all benefits are paid but

The Committee concluded that more seriously injured plaintiffs should have access to the courts for the assessment of non-economic loss on an individual, non-scheduled, case by case basis. The Committee recommended a verbal threshold to define those more serious cases which would have access to the courts. The threshold recommended is set out at page 167 of the Committee's Report as follows:

> (a) He must be able to establish that he has suffered:
>
> (i) serious and permanent injury resulting in substantial and medically demonstrable impairment affecting the resumption of customary activities; or
>
> (ii) permanent loss of important bodily functions; or

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on a first party no fault basis. Quebec has the only pure no fault plan for bodily injury in North America.

[14] Select Committee on Company Law, Second Report (1978), p. 166.

[15] The Committee split 8 for, 6 against (no abstentions) in favour of its no fault recommendation.

[16] Select Committee on Company Law, Second Report (1978), p. 166

(iii) significant permanent scarring or disfigurement;

otherwise he is not to be entitled to make a claim whatever against any third party.

(b) He must be able to establish at the very beginning of any litigation that the gravity of his injuries fulfills one of the foregoing tests, otherwise he is not to be entitled to continue the prosecution of his claim.

(c) His right of recovery should be subject to the traditional rules of the law of negligence, so that the customary inhibitions of the fault system will apply.

(d) The compensation which he may recover should be limited to non-economic losses for which no compensation is provided under the no fault program.

(e) There should be a limit on the amount recoverable under this provision. The Committee considers that $100,000 is a reasonable maximum.

It is clear that it was the Committee's intention to deal with the vast majority of cases for non-economic loss on a scheduled basis with '"extra-ordinary" claims', that is, claims passing the threshold, being dealt with in the tort system.[17]

In the end result, for bodily injury claims, the Committee recommended unlimited medical and hospital rehabilitation benefits, payment of economic loss on a no fault basis, unlimited as to time but subject to a weekly maximum, and payment of non-economic compensation for all except the most serious injuries on a scheduled basis. The Committee recommended that access to the courts be preserved for cases passing a verbal threshold, subject to a maximum non-pecuniary damage assessment potential of $100,000.

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[17] Select Committee on Company Law, Second Report (1978), p. 167.

The Committee also recommended that vehicle damage be dealt with on a no fault basis. Its approach to collision insurance was somewhat different from that taken in the 1973 O.L.R.C. Report. The Committee recommended that every automobile policy should contain, as a compulsory feature, a form of coverage under which the insurer agreed to pay its insured's collision damage up to $250, to the extent that the insured was able to establish his innocence. It was contemplated that this would be done by way of a fault chart, although the Committee did not emphasize this to any significant degree. Beyond the mandatory first party fault-based access to the first $250 loss, vehicle owners would be able to purchase collision coverage on an optional basis. The Committee obviously contemplated a collision coverage plan, similar to the vehicle damage part of Michigan's threshold no fault scheme. The net result of the recommendation was that if an insured did not buy any collision coverage, his insurer would be obliged to pay nothing above the mandatory first party coverage.

The Committee emphasized that its collision damage recommendation was based on a premise that all collision damage compensation would be paid on a first party basis. There would be no right of action against any third party wrongdoer, either by the insured suffering the collision damage, or by his insurer through subrogation.

Although cost, and a desire to compensate all victims of automobile accidents, were paramount considerations, the Committee seems to have been responsive to a concern about public expectations, particularly in the area of non-pecuniary relief. It was this concern that seems to have caused it to recommend fault charted, non-pecuniary relief for cases falling below the recommended threshold and access to the courts for cases meeting the threshold.

The Committee recommended that the threshold issue be determined at the time proceedings are commenced.[18] This seems to me to be impractical. It would necessarily lead to delay, especially in those grey area cases where there is some real question as to whether the injured person met or did not meet the threshold. Substantial transaction costs would be added to the system if the threshold issue were decided in a proceeding separate from the trial. The determination of the threshold issue at the time of the commencement of the proceedings is a practice which has not been adopted in those jurisdictions in the United States having either monetary or verbal thresholds.

The Committee's treatment of the deterrence issue, as related to both the tort system and its recommended substitution, no fault, was somewhat superficial. The Committee considered the prospect of one's own death or injury, the criminal law, the anguish of being involved in an accident, and licence suspension as being the major deterrence-related factors. No specific consideration seems to have been given to the impact of no fault, in and of itself, on the deterrence issue.

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[18] Select Committee on Company Law, Second Report (1978), p. 167, para. 6(b).

C. THE ONTARIO TASK FORCE ON INSURANCE 1986 REPORT

From 1978 through 1986, the debate over no fault compensation for automobile accident victims was ubiquitously muted. Some (particularly academics repelled by the tort system's failure as a compensation system) continued the no fault debate. New Zealand's comprehensive, but still unexported, accident compensation scheme and some of the threshold no fault plans in the United States were looked to as models. Then came the liability insurance crisis of 1985-86.

In late 1985 and through most of 1986, certain liability risks became uninsurable and other risks were insurable only with dramatically increased premiums. Policy limits were lowered, deductibles were increased, exclusions were expanded and policy forms were changed to claims-made as opposed to occurrence-based. Manufacturers, exporters to the United States, day care centres, truckers, bus and transit operators, municipalities and school boards, professionals, directors and officers, sport and recreation groups, hospitals and the hospitality and tourism industry were all identified within Ontario as being victimized by the liability insurance crisis.[19]

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[19] Ontario Task Force on Insurance, Final Report (1986), pp. 32-34.

Collusion among insurers, cash flow underwriting responsive to high interest rates, and the cyclical nature of the insurance industry, resulting in an inevitable inverse relationship between investment income and premiums, were three of the prominent explanations for the crisis.[20] The United States Justice Department rejected all of these and concluded that the expansion of corporate liability exposure in tort law had led to the crisis.[21] In Ontario, Professor Michael Trebilcock reached much the same conclusion.[22]

Liability insurance through this period was either unavailable or too expensive for many. Affordability, availability and fairness were dominating liability insurance issues which eventually triggered a political response. That political response was the appointment of a Task Force on January 9, 1986 by the Minister of Consumer and Commercial Relations. The Task Force's mandate was to find "solutions for cost and capacity problems in the property and casualty insurance industry in Ontario". The Task Force's recommendation of no fault automobile insurance led to this Inquiry.

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[20] George Priest, Modern Tort Law and the Current Insurability Crisis (Working Paper No. 44 of the Program in Civil Liability, Yale Law School, February 1987); David Gill, Liability Insurance: Crisis in Supply (Vancouver, B.C.: The Fraser Institute, 1987).

[21] U.S. Department of Justice. Tort Policy Working Group, Report on the Causes, Extent and Policy Implications of the Current Crisis in Insurance Availability and Affordability (Washington: U.S.D.J., 1986); An Update to the Liability Crisis (Washington: U.S.D.J., 1987). [Henceforth: Tort Policy Working Group, Report (1986)].

[22] Michael J. Trebilcock, The Insurance-Deterrence Dilemma of Modern Tort Law (University of Toronto, May 1986).

By any reasonable standards, the Task Force Report represents an impressive undertaking. It provides a comprehensive analysis of the liability insurance crisis and proposes a number of sensible, and, I think, workable recommendations.

The Task Force concluded that the liability insurance crisis could be resolved neither by tort reform nor by the resolution of issues which later collectively became known as the "justice issues".[23] The Task Force concluded that changes in joint and several liability, the collateral source rule, gross-up (structured settlements), damage assessment excesses resulting from the Family Law Reform Act (F.L.R.A.) (now Family Law Act, 1986 (F.L.A.))[24] and prejudgment interest would not solve the liability insurance crisis. The crux of the Task Force's conclusion was that the tort system itself was the root cause of the problem. This statement appears at page 58 of the Task Force Report:

> The Task Force has concluded, however, that the problems that pervade the personal injury area and that in large measure have caused the current liability insurance "crisis" cannot be resolved through further reform of the tort system.

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[23] The "justice issues" include prejudgment interest, Family Law Act claims, gross-up (structured settlements), joint and several liability and the collateral source rule.

[24] R.S.O. 1980, c. 152; S.O. 1986, c. 4.

The Report deals with automobile insurance under the heading of "Other Insurance Issues".[25] This designation of the subject was appropriate as automobile insurance fell outside the ambit of those matters directly relevant to the liability insurance crisis. The separation of automobile insurance problems from liability insurance issues is first specifically recognized at page 23 of the Report:

> ...although there is no general crisis of price or availability of personal automobile insurance in Ontario, there are clear indications of a trend of increase in the real cost of claims for bodily injury, together with indications of a trend towards a more litigious approach to such claims. These trends have little to do with the insurance cycle, but they have become more visible as the trough of the shift to a hard market has approached.

The Task Force envisaged a "no-tort" (the Task Force purposefully distinguished no-tort from no fault) first party comprehensive accident compensation scheme, run by the private sector.[26] Quebec's no fault automobile accident compensation plan and New Zealand's comprehensive accident plan (each delivered by a public monopoly) were relied on as precedents, if not models. The Task Force recommended that in its first stages, the no fault accident compensation scheme should apply only to automobile accident injury compensation.

To understand the Task Force's recommendations on automobile insurance, it is important that they be placed in the appropriate context. The Task Force Report's long-term recommendation was for a comprehensive, no fault disability compensation scheme. The recommendation for no fault automobile insurance and automobile accident compensation seems to have been subservient to the recommendation that accident compensation generally be on a no fault, first party basis.

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[25] Ontario Task Force on Insurance, Final Report (1986), p. 71.

[26] Ontario Task Force on Insurance, Final Report (1986), p. 67.

In dealing with the issue of automobile insurance and automobile accident compensation, the Task Force recommended a first party no fault plan with disability benefits of approximately $600 a week maximum. The idea was to provide income replacement in response to automobile accident-caused disabilities for a "...clear majority of the population of Ontario ...".[27] The Task Force made recommendations for the provision of disability benefits to students, homemakers and children as well as unlimited medical and rehabilitation benefits.

Although pure no fault (a no fault plan providing no access to third party fault-based relief) was the Task Force's clear preference, the Report made an alternative recommendation of threshold no fault. The preferred threshold was not described, although the Task Force seemed to have been impressed with the Michigan threshold no fault compensation scheme. Michigan's threshold, aside from death and a cosmetic injury provision, requires a "serious impairment of body function" before an injured person can sue on a fault basis for non-economic loss (pain, suffering, loss of enjoyment of life).

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[27] See Ontario Task Force on Insurance, Final Report (1986), p. 77.

In dealing with premium rating, the Task Force recommended a bonus/malus rating system.[28] It is not entirely clear to me whether this was to be the basis of premium rating, or simply a premium surcharge mechanism, to operate along with a remodelled classification system with the eventual elimination of age, sex and marital status as rating criteria.

Although the Task Force Report was generally applauded, its "first step", no fault automobile insurance, elicited considerable criticism. The absence of costing, the approach to the deterrence issue, the failure to consider the prospect of improving Ontario's present add-on system and the Task Force's criticism of the tort system for not being able to do what it was allegedly never intended to do, were some of the more prominent issues raised in the critical response to the Task Force Report.

As the liability insurance crisis diminished toward the latter part of 1986, automobile insurance increasingly became a social and political problem. Premium levels, the abuse of the residual market, unacceptable underwriting practices, and the industry's failure to deliver first party no fault benefits promptly were the most commonly voiced complaints. The decibel level of cries for a government takeover of automobile insurance increased. On April 23, 1987, the provincial government undertook a number of initiatives. Premiums were frozen at April 23, 1987 levels and premium roll backs were mandated for taxis and males under 25. This was clearly a political response to what was thought to be a political problem.

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[28] Ontario Task Force on Insurance, Final Report (1986), p. 82.

On April 23, 1987, the Minister of Financial Institutions also announced that automobile insurance would henceforth be subject to regulatory control and draft legislation was quickly prepared. This legislation will be discussed in more detail in Chapter 16 dealing with rate regulation. For now all that need be said is that the proposed regulatory scheme would have an independent rate review board establish relevant rates, or a range of rates, within a mandated classification system. This would be achieved through industry-wide hearings open to the public. Once rates or ranges of rates were established, insurers would file their proposed rates for approval.

The Legislature rose for its summer recess before the Minister's April 23rd proposals had been dealt with. Nevertheless, most insurers gave refunds to policyholders who would have been entitled to a premium reduction, thus giving effect to the Minister's intent to freeze premiums as of April 23, 1987.

It is against this background that this Inquiry proceeded. I have attempted to approach all relevant issues fairly and in an atmosphere of full consultation. I have listened to and received written submissions from the public, interested groups and organizations and from those pejoratively described as "special interest groups". All have been helpful. In the final analysis, I confess to having considered the interests of those who purchase automobile insurance and those who are injured in motor vehicle accidents as the dominant interests to take into account.

CHAPTER 3

WORK OF THE INQUIRY

A. ADVISORY COMMITTEE

The Order-in-Council authorizing this Inquiry directed me to establish an Advisory Committee whose members were to be appointed in consultation with the Attorney General and the Minister of Financial Institutions. The Committee members were drawn from three groups affected by the outcome of the Inquiry: the insurance industry, the Bar and the public. The Superintendent of Insurance, John P. Weir, was made an ex officio member of the Advisory Committee. I am grateful to him for his assistance both at the Advisory Committee level and throughout.

Counsel and I met with the Committee on a monthly basis from February to October, 1987, to discuss major issues, submissions and research projects. The Committee members each made a significant contribution to the work of the Inquiry. Their views on relevant issues were expressed with clarity, reasonable persistence and in an atmosphere of civility.

B. WRITTEN SUBMISSIONS

The Inquiry placed advertisements in newspapers and journals throughout Ontario inviting submissions. All those who made submissions or responded in writing to recommendations of the Ontario Task Force on Insurance were advised that their submission to the Task Force, or their response to the Task Force's Report would be considered along with submissions made directly to this

Inquiry. I reviewed over 200 submissions to the Task Force on Insurance and over 140 to the Inquiry.

I have received written submissions from the insurance industry, the Bar, the automotive industry, health care professionals, academics, government departments, the New Democratic Party, consumers, victims of automobile accidents and from consumers having particular concerns or complaints about automobile insurance-related matters.

C. PUBLIC HEARINGS

Informal hearings were held in Toronto, Ottawa, Thunder Bay, Kitchener, London and Windsor. These hearings were advertised in appropriate newspapers and attended by interested members of the public and those who had made written submissions. In many respects the evidence received at these informal hearings mirrored the written submissions made to the Inquiry. Consumers having automobile insurance-related concerns, motor vehicle accident victims, health professionals (including rehabilitation specialists), the insurance industry (adjusters, brokers and companies), the Bar and some interested in Inquiry issues from a political perspective gave evidence or made statements at these hearings. I am grateful to all those who took the time to attend these hearings.

D. MEETINGS AND TRAVEL

I thought it sensible to seek advice and information from outside Ontario. Accordingly, counsel and I travelled to other provinces, Europe and the United States.

Where possible, I attempted to obtain a balance of opinion. Counsel and I met with insurers, lawyers, judges, government insurance officials, consumer advocates, rehabilitation specialists, doctors, academics, court officials and consumers. Throughout, I received an abundance of hospitality, cooperation and assistance.

We visited Manitoba, Saskatchewan, British Columbia and Quebec because those provinces have government-delivered automobile insurance plans. I am grateful to all those who assisted counsel and me to better understand the structure and performance of those government insurance plans. My gratitude extends to officials of the Quebec Régie, the Manitoba Public Insurance Corporation, the Saskatchewan Government Insurance office and the Insurance Corporation of British Columbia. I also appreciate the assistance provided by judges, lawyers, academics, consumers and politicians in those provinces.

Edmonton, Alberta, was more than a pitstop between Saskatchewan and British Columbia. My gratitude is extended to the chairman, counsel and staff of the Alberta Automobile Insurance Board, as well as those in the academic community and judges, who were kind enough to meet with us.

Travel to the United States was directed to those states having threshold no fault plans. We travelled to Michigan (on three occasions), Minnesota, New York, Pennsylvania and Florida. In each state we met with government insurance officials, attorneys and, in some instances, judges.

We also travelled to Washington, D.C. to meet with officials of the Department of Justice, the U.S. Department of Transportation, the General Accounting Office and the National Insurance Consumers' Organization.

At the invitation of the Minister of Financial Institutions and the Superintendent of Insurance, counsel and I also travelled to England, Germany, Switzerland and France to speak with executives of major insurance companies doing business in Ontario and to obtain information about compensation schemes in Europe. We were particularly interested in the Swiss bonus/malus rating system which the Ontario Task Force on Insurance recommended incorporating into Ontario's system of premium rating. Our visit to France was short. We spoke to Dr. Andre Tunc, author of numerous books and articles on no fault insurance. In England, we met with insurers, politicians, the Bar and academics.

E. RESEARCH REVIEW

In May 1987 we met with a number of distinguished academics to discuss major insurance compensation issues. The participants at this meeting, chaired and organized by Professor Michael Trebilcock of the University of Toronto, included: J. Robert S. Prichard, Dean, Faculty of Law, University of Toronto; Professor Paul Halpern, Faculty of Management Studies, University of Toronto; Professor Samuel A. Rea, Jr., Institute of Policy Analysis, University of Toronto; Professor Peter Hogg, Osgoode Hall Law School, York University; Professor Marc Gaudry of the Université de Montréal; Professor Gary Schwartz of the University of Southern California; Professor Stephen Sugarman of the University of California at Berkeley; Dr.

Patricia Danzon, Associate Professor, Health Care Systems and Insurance, The Wharton School, University of Pennsylvania; and Professor Jeffrey O'Connell of the School of Law, University of Virginia.

In a one and one-half day session, we evaluated the current system of motor vehicle accident compensation in Ontario. We examined the basic alternatives: retention of the tort system with an expansion of no fault benefits, threshold no fault (monetary or verbal), pure no fault and other available alternatives. Finally, we dealt with the issue of a privately-run versus publicly-run automobile insurance system.

F. RESEARCH STUDIES

The research studies commissioned for the Inquiry focussed on certain basic questions about the current system of motor vehicle accident compensation and the effect of proposed changes to the system.

Joe Cheng, an actuary with Eckler Partners Ltd., and an invaluable consultant to the Inquiry, conducted three claims surveys and provided endless helpful advice. The first claims survey covered bodily injury liability claims closed during 1986; the second survey covered accident benefits claims for accidents which occurred in 1985; the third survey dealt with ongoing bodily injury liability claims which were closed during a six-week period in 1987. These surveys will be referred to in detail later. In general, the idea was to examine and break down both liability insurance and accident benefit payments to identify the components of claims paid, the economic and injury profiles of claimants, transaction costs and collateral sources of compensation.

The data from the surveys were also used to determine what increases or decreases in costs would result from the implementation of a variety of compensation plans under consideration.

Professor Samuel Rea, Jr., constructed a model which allowed him to combine a number of unrelated data sources into a single sample which simulated the population of motor vehicle accident victims. The purpose of the study was to pinpoint gaps in coverage and estimate the effects of changes in insurance coverage and benefit levels.

Reginald Spear, Director, Insurance Industry Consulting Services of Peat, Marwick and Partners conducted a series of interviews with insurance company executives to present a profile of the automobile insurance business -- its pricing, sales and marketing, claims settlement, policy administration and accounting methods.

Professor Paul Halpern, together with a research team, analysed the structure of Ontario's automobile insurance industry from the point of view of industrial organization. He then compared the relative efficiency of Ontario's system of compensation with the publicly-run automobile insurance schemes in British Columbia, Manitoba and Saskatchewan. This study was directed to the role government should have in the regulation and delivery of automobile insurance.

The Inquiry also commissioned a research study from Professor Gerald Wilde of Queen's University on the issue of road safety, particularly through incentives and deterrence.

Dr. Norman White of the Faculty of Health Sciences at McMaster University provided a paper on the function of deterrence in motor vehicle accident compensation schemes.

Professor Marc Gaudry prepared a paper based upon his extensive research following the introduction of no fault in the province of Quebec and dealing with the issues of deterrence and an optimal approach to premium rating in a no fault environment.

Professor Peter Hogg provided an opinion to the Inquiry on the constitutionality of pure and threshold no fault plans and related issues.

I also wish to acknowledge the assistance provided by many of the research papers prepared for the Ontario Task Force on Insurance. Many of those research papers were helpful to me in examining issues before this Inquiry.

CHAPTER 4

THE AUTOMOBILE INSURANCE INDUSTRY IN ONTARIO

A. STRUCTURE

Ontario's 5.7 million drivers buy compulsory and optional insurance from 102 insurers, including individual companies and corporate groups.[1] These companies include:

(i) Ontario chartered companies;
(ii) federally chartered Canadian companies;
(iii) extraprovincial chartered companies; and
(iv) federally registered branches of British and foreign insurance companies.

The direct premium income generated by the sale of automobile insurance in Ontario amounts to approximately $3 billion annually. All insurance companies selling automobile insurance in Ontario must be licensed.

Based on premium income, the top 10 insurers in Ontario have 53% of the market. The top 20 insurers have 74% of the market. Fifty-two insurers write more than

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[1] To identify the number of insurers selling automobile insurance in Ontario, insurers have been counted on a group basis. For example, the Economical Group includes Economical Mutual Insurance Company, Perth Insurance Company and Missisquoi and Rouville Insurance Company. The Halpern study, Inquiry Research Study II, indicated that, as of 1984, there were 112 groups of insurers writing automobile insurance in Ontario. Sixty-six of those groups accounted for over 99% of the business.

$10 million of automobile insurance premiums annually.[2] The market is unconcentrated. The concentration ratios for the top four (C4), top eight (C8) and top 20 (C20) insurers from 1974 through 1984 can be seen from Table 4.1 below. Appendix XVIII sets out the 52 companies writing more than $10 million of automobile insurance premiums in 1986.

TABLE 4.1

CONCENTRATION RATIOS FOR ONTARIO AUTOMOBILE INSURANCE[3]

	C4	C8	C20
1974	27.43	42.59	66.59
1975	28.90	44.28	67.62
1976	30.46	47.86	71.88
1977	33.90	51.21	75.17
1978	36.66	54.21	79.81
1979	36.89	55.79	83.48
1980	33.32	51.39	77.89
1981	31.10	48.34	75.32
1982	27.57	44.51	71.80
1983	27.94	44.84	73.95
1984	27.82	44.53	73.95

The Compulsory Automobile Insurance Act makes it unlawful for an owner of a motor vehicle to operate that motor vehicle on a highway, or permit that vehicle to be operated on a highway, unless the vehicle is insured.[4] Bodily injury and property damage coverage, to minimum limits of $200,000, is compulsory. Accident benefits (no fault) coverage[5] is mandatory as is uninsured/unidentified motorist coverage.[6] The Compulsory Automobile Insurance Act has created a legislated coverage demand, but the Insurance Bureau of Canada estimates that more than 90% of motor vehicle owners were insured before insurance became compulsory in 1980. Police accident records indicate that approximately 98% of motor vehicle owners in Ontario are insured.[7]

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[2] Canadian Insurance Agent and Broker, 1987 Annual Review of Statistics.

[3] Superintendent of Insurance for Ontario, Annual Reports, for years 1974 to 1984. Industry concentration ratios will be dealt with in Chapter 16.

[4] R.S.O. 1980, c. 83, s. 2.

The automobile insurance market may be divided into four areas: the standard market, the substandard market, the residual market and the specialty market (taxis, long-distance haulers, motorcycles and other identified singular risk groups).[8] The standard market is a somewhat amorphous term; its definition depends upon the willingness of the insurance companies to provide coverage at any given time. In general, the standard market includes people whom insurers consider to be among the better risks in the population. Not all those who are insured through the standard market are free of at-fault accidents or driving-related convictions. Standard market risks may be rated as preferred risks; some insurers have an even higher classification. Many companies employ a "star" system for characterizing insureds. In the standard market, six stars is the highest internal classification and zero is the lowest. An increasing number of insurers attempt to identify the best standard market risks; this risk group is given a preferred risk designation with an accompanying premium reduction.

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[5] R.S.O. 1980, c. 218, ss. 232, 233.

[6] Insurance Act, R.S.O. 1980, c. 218, ss. 219, 231.

[7] It is interesting to compare the Ontario situation with that of Florida. Florida is a populous state where bodily injury and property damage coverage is not compulsory. Limited no fault coverage ("personal injury protection" coverage) is mandatory. In a meeting with Florida state government insurance officials, I was told that 31% of motor vehicles in the state were not insured for third party bodily injury and property damage; in Dade and Broward counties (counties including the cities of Miami, Fort Lauderdale and Pompano Beach), 55% of motor vehicle owners have no third party bodily injury and property damage coverage. Many of those who have the optional coverage carry only Florida's minimum limits -- $10,000 for an injured person and $20,000 for each accident.

[8] The specialty market seems to be vanishing. There are individual insurers who appear prepared to accept specialty risks.

If an insured's driving record, or some other factor, results in an application for insurance being declined, the applicant may seek insurance from other companies in the standard market or through what has been characterized as the substandard market. In Ontario, there are three companies whose marketing policy is directed toward the substandard market; these companies seek and write good surchargeable business.[9] For example, the substandard market will often insure a driver who has been convicted of impaired driving; the underwriting theory is that the conviction may not indicate more than transitory aberrant driving behaviour. Two of the three companies in the substandard market will not insure newly licensed drivers, at least until those drivers have acquired one year's driving experience. If nothing else, this shows the substandard market's response to both age and driving experience as underwriting factors. In hard market times, business in the substandard market expands.

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[9] These companies are: Pafco, Progressive Casualty and Kingsway General Insurance.

The substandard market's premium rates are related to those charged by the residual market, the Facility Association. Substandard premium rates are generally 7.5 to 10% below residual market rates. An insured unable to obtain coverage in the standard market has two real choices. One is to attempt to obtain coverage through the substandard market at Facility Association rates, less 7.5 to 10%; the other is to insure through the residual market. If the consumer is aware of the existence of the few substandard market writers, the choice is clear.

The residual market is for those who cannot obtain insurance in the standard and substandard markets. It was created 33 years before automobile insurance was made compulsory. In 1947, Ontario insurers, with the concurrence of the provincial government, established the Ontario Assigned Risk Plan to provide coverage for high risk drivers. Applicants who had been refused coverage by at least two insurers were assigned to licensed insurers on a prorated basis.

In 1967, a new residual market, The Facility, was created by the insurance industry to replace the Assigned Risk Plan and to operate on a Canada-wide basis. Unlike its predecessor, the Assigned Risk Plan, The Facility was a risk-pooling mechanism. Each province's residual market activity and results were separately maintained. An insurer could cede 85% of a risk to The Facility if it considered that its book premium was inadequate. The insurer retained 15% of the risk. In The Facility environment, insurers accepted risks through the corporate front door and ceded them through the back door. One of the objectives was to remove the stigma from insureds who had been placed in the Assigned Risk Plan after being refused insurance through the standard market.

On December 1, 1979, The Facility was replaced by the Facility Association, Ontario's current residual market. The change came about because of two major complaints from a number of Ontario insurers. They were:

1. Each company had its own rates and surcharges so it was thought that companies ceded business to The Facility at inappropriately low rates (given the nature of the risk being ceded).

2. Some insurers suspected others were ignoring underwriting criteria and charging premiums at inappropriately low rates on the ceded business considering the risk being written.

Third party liability and accident benefits coverage became compulsory in 1980. Compulsory insurance and the fact that insurers were not required to take all comers made it imperative that insurance would be available to all those required by law to purchase it. This was accomplished by bringing the residual market, the Facility Association, within the perimeters of the Compulsory Automobile Insurance Act.[10]

Consumer contact with the Facility Association is available through 11 servicing carriers:

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[10] R.S.O. 1980, c. 83, s. 7.

Allstate Insurance Company of Canada
Canadian General Insurance Company
The Canadian Surety Company
Commercial Union Assurance Company of Canada
Co-operators General Insurance Company
The Dominion of Canada General Insurance Company
Guardian Insurance Company of Canada
Liberty Mutual Insurance Company
Royal Insurance Company of Canada
State Farm Mutual Automobile Insurance Company
Wellington Insurance Company.

These carriers connect the Facility Association residual pool and the consumer. Each Ontario broker who wishes to provide service to residual market risks is assigned one of the 11 carriers. A broker writing Facility Association risks earns a commission which has now been capped by the Superintendent of Insurance. Servicing carriers are reimbursed for operating, servicing and claims adjusting costs.[11]

The Facility Association's profits and losses are shared by all insurers. The Facility Association underwrites both private passenger automobiles and commercial vehicles (taxis, couriers, leasing operations, long-haul truckers, etc.). As of August 1987, 1.7% of private passenger motor vehicles in Ontario were insured through the Facility Association, which will accept any risk, regardless of how bad it is, but will charge higher than market premiums and will, where relevant, levy appropriate surcharges. If the owner of a motor vehicle is entitled by law to drive, the Facility Association will provide coverage.

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[11] Facility Association, 1986 Annual Statement.

The Facility Association provides the residual market for all provinces except Quebec,[12] Manitoba, Saskatchewan and British Columbia where compulsory insurance is supplied through public monopoly. As of its 1986 year end (October 31, 1986), the Facility Association showed a deficiency of expenses over revenue of $29.6 million. Ontario's losses equalled 52% of the total Canadian losses, or more than all the other provinces combined. Ontario accounts for 71.85% of Facility Association written premiums.[13]

Facility Association premium rates are subject to the approval of the Superintendent of Insurance, as provided in section 10 of the Compulsory Automobile Insurance Act;[14] rate filings are not rubber stamped. The Facility Association rate filing made for January 1, 1987, sought rate increases of 23.2% for private passenger motor vehicles and 13.1% for commercial vehicles. Upon reviewing the Facility Association's application, the Superintendent of Insurance concluded that the rate increases sought were unacceptable and the Facility Association rate filing was withdrawn. Lower rate increases were subsequently approved.

Facility Association private passenger basic premiums are about 205% of the weighted average standard market premiums. Its premiums for private passenger motor vehicles are based upon the classification system used in the regular market.[15] The Facility Association also imposes premium surcharges including surcharges based on convictions.

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[12] There is a residual market in Quebec where vehicle damage coverage is compulsory and provided by the private sector.

[13] Facility Association, Financial Statement for year ending October 31, 1986.

[14] R.S.O. 1980, c. 83.

Table 4.2 below sets out a breakdown of claims costs in the Facility Association. The significance of age is apparent.

TABLE 4.2

FACILITY ASSOCIATION

POLICYHOLDER CLASSIFICATIONS AND CLAIMS COSTS[16]

Classification	1985 Claims Cost per Car Insured for Liability Insurance
Adults, pleasure use only	$ 249.93*
Business cars	350.42*
Single male drivers aged 16 to 18	1,255.80*
Policyholders 5 years claims-free	258.16*
Policyholders 1 year claims-free	479.39*
Policyholders in Toronto	342.42
Policyholders in Northwestern Ontario	178.93

*taken from the experience for all urban territories combined.

The development of the Facility Association's share of the market by vehicles and premium in Ontario can be seen from Table 4.3 below:

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[15] This means Facility Association premiums are based on age, sex and marital status, among other things.

[16] Insurance Bureau of Canada, Automobile Insurance Experience, ("The Green Book"), 1985.

TABLE 4.3

FACILITY ASSOCIATION SHARE OF MARKET 1982-1986[17]

ONTARIO

	1982	1983	1984	1985	1986
BY VEHICLES INSURED (Third Party Liability)					
Private Passenger	2.0	2.5	1.9	1.5	1.7
Farmers (private passenger)	.5	.9	.9	.8	.8
Motorcycles	22.9	30.3	20.6	15.8	9.7
Snow vehicles	2.7	7.2	8.3	7.3	7.2
Commercial	1.9	2.8	2.3	1.8	3.5
BY PREMIUM (Third Party Liability)					
Interurban	5.9	11.4	6.2	3.3	23.5
Taxis	10.8	24.4	19.2	14.5	46.0
Public buses	1.7	4.3	2.6	4.1	15.1
School & hotel buses	2.4	2.8	2.5	2.2	2.3
Funeral & ambulances	2.6	-	.3	5.3	10.1
Miscellaneous public	.1	3.8	2.7	5.5	7.8
Garage	1.9	3.8	3.8	3.7	7.6
Garage legal liability	1.5	3.9	3.8	2.4	4.1

Surprisingly, 28.79% of Facility Association drivers are five-year claims-free drivers; 80.79% of those insured through the voluntary market are five-year claims-free drivers. 10.13% of Facility Association drivers had claims in 1985, as compared to 2.01% of all drivers insured through the voluntary market.[18]

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[17] The Green Book, The Grey Book (Facility Association Automobile Experience), 1986.

[18] Facility Association, "Presentation to Task Force on Insurance in Ontario" (February 26, 1986), p. 18.

Table 4.4 shows how different in character the Facility Association and regular market private passenger automobile risk pools are.

TABLE 4.4

CLAIMS HISTORY COMPARISON[19]

Facility Association % of Total	Claims History	Total Industry % of Total
28.79	5-year claims-free	80.79
44.55	3-year claims-free	13.46
7.00	2-year claims-free	1.81
9.54	1-year claims-free	1.94
10.13	0-year claims-free	2.01

The Facility Association's business for all motor vehicles other than private passenger automobiles has increased for a number of reasons. The provincial government's "Spills Bill" and the United States Commerce Commission requirement that certain long-distance haulers have a minimum of $5 million of third party liability coverage are examples of statutory and regulatory provisions which have led to an increase in the commercial population of the Facility Association. Further, a number of United States insurers which provided the required coverage on a fronting policy basis have withdrawn from the market leaving some Ontario commercial risks without the required United States coverage. The insolvency of the United Canada Insurance Company, an insurer providing coverage for many inter-urban haulers, temporarily placed many of those risks in the Facility Association; regular market coverage is now becoming available for a number of them.

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[19] Facility Association, "Presentation to Task Force on Insurance in Ontario," (February 26, 1986), p. 19.

Applicants for private passenger automobile insurance who are insured through the Facility Association should be limited to those who have been denied coverage in the standard or substandard markets. There are, however, instances of brokers placing risks in the Facility Association without having made any real attempt to secure standard or substandard market coverage.

Although I have encountered examples of insureds in the residual market who should not be there, it is clear that the loss experience of the 1.7% of Ontario private passenger drivers who are insured through the Facility Association is dramatically different from the loss experience of the regular market. Table 4.5 provides a comparison of Facility Association and regular market loss costs per car insured from 1981 through 1985.

TABLE 4.5

THIRD PARTY LIABILITY[20]

LOSS COST PER CAR INSURED

Facility Association		Total Industry	
Year	Average Loss Cost ($)	Year	Average Loss Cost ($)
1981	613.26	1981	180.68
1982	591.87	1982	182.48
1983	654.71	1983	203.28
1984	781.05	1984	241.68
1985	973.46	1985	284.65

Taxis present a problem which, in Toronto, can be described as ranging from difficult to impossible. I will discuss taxis later in more detail; for now, I simply note that the loss experience for Toronto fleet taxis is so bad, even with the substantial Facility Association premiums, that taxi risks are almost uninsurable.

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[20] The Green Book, 1985.

The enormity of this problem has been recognized by the Metropolitan Toronto Taxi Association; in its brief and oral submission to this Inquiry the Association proposed government-delivered, no fault insurance. As one member of the Metropolitan Toronto Taxi Association delegation put it, any private sector insurer which was considering insuring taxis first had to decide whether that part of the insurer's operation was a business or a philanthropic exercise. The Metropolitan Toronto Taxi Association's recommendation of government insurance was based on the premise that only the government could subsidize taxis in the circumstances. This is a precarious basis upon which to proceed to government insurance.

The majority of taxis in Toronto are now insured through the Facility Association. In 1985, 3.6% of Toronto territory taxis were insured through the Facility Association.[21] In 1986, 50.3% of Toronto territory taxis were insured through the Facility Association.[22] The dramatic increase in the Facility Association's taxi business can be seen from Table 4.6.

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[21] Facility Association, "Presentation to the Metro Toronto Licensing Commission," (June 22, 1987).

[22] Facility Association, "Presentation to the Metro Toronto Licensing Commission," (1987).

TABLE 4.6

TAXICAB INSURANCE[23]

ONTARIO AND TORONTO RATING TERRITORY

FACILITY ASSOCIATION SHARE	TOTAL MARKET	TORONTO ONLY
1982	10.8%	1.9%
1983	24.4%	8.4%
1984	19.2%	3.8%
1985	14.3%	3.6%
1986	45.7%	50.3%

Total market - 1985	$14,535,576	Actual
Facility Association share	$ 2,075,467	Actual
Total market - 1986	$18,090,515	Estimated
Facility Association share	$ 8,267,123	Actual

The regular market has simply stopped writing taxi business except for owner-operated taxis and, in some circumstances, co-operative taxis. This decision is justifiable with regard to fleet taxis operated in Metropolitan Toronto. In the Toronto rating territory, the Facility Association 1986 taxi premium income for all coverage was $3.75 million. Claims were $5.46 million. The three-year period extending from 1984 to 1986 presents an equally bleak picture. In that period, premiums were $19.6 million; claims were $38.37 million. The accident benefits coverage results were worse. In the 1984 to 1986 period, accident benefit premiums were $464,543; accident benefit claims were $4,565,308 or 983% of premiums.[24]

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[23] Facility Association, "Presentation to the Metro Toronto Licensing Commission," (June 22, 1987).

Finally, Table 4.7 shows the total deficit in the Facility Association for 1982 through 1985.

TABLE 4.7

FACILITY ASSOCIATION DEFICIT

Year	Amount of Deficit
1982	$14,986,000
1983	$32,485,000
1984	$44,304,000
1985	$39,868,000

It is apparent that Ontario drivers insured in the regular market are subsidizing, through their premiums, those insured in the Facility Association. I will return to this issue of cross-subsidization later in the Report.

B. MARKETING

About 74% of automobile insurance sold in Ontario, measured by premiums, is provided through independent brokers. Brokers are licensed under the Registered Insurance Brokers Act (R.I.B.O. Act).[25] Virtually all of the remaining 26% of automobile insurance is marketed through direct sales agents, who are almost invariably employees of an insurer and are regulated under the

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[24] Facility Association, "Presentation to the Metro Toronto Licensing Commission," (1987); "The Green Book," 1986.

[25] R.S.O. 1980, c. 444. The definition of insurance broker is found in Section 1(1).

Insurance Act.[26] Agents (as distinct from brokers and direct sales agents) have a minimal involvement in the sale of automobile insurance. Some insurers use both brokers and company-employed sales agents.

The Insurance Brokers Association of Ontario (I.B.A.O.) and the Toronto Insurance Conference (T.I.C.) represent the collective interest of most Ontario brokers. There are, however, a considerable number of brokers who do not belong to either organization. Those brokers are somewhat cut off from the information supplied by the I.B.A.O. and T.I.C. Although there are obvious advantages to association membership, I do not think brokers should be required to belong to any specific organization, including the I.B.A.O. or the T.I.C. Both the I.B.A.O. and T.I.C. are involved in education programs that need not be detailed here. This is to be encouraged.

The Registered Insurance Brokers of Ontario (R.I.B.O.) is the broker's licensing and disciplinary body. I did not regard a review of R.I.B.O.'s licensing function as being within my mandate; therefore, I will not comment on the extent to which unqualified brokers may be licensed under the R.I.B.O. Act except to say that the issue should be examined and monitored. R.I.B.O. is also responsible for disciplining brokers. A review of this part of R.I.B.O.'s undertaking suggests that the most common problem requiring disciplinary intervention is the misuse of trust funds by brokers.

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[26] R.S.O. 1980, c. 218. The definition of agent is found in Section 1.5.

R.I.B.O. does not monitor those insurers that individual brokers represent nor does any other regulatory body record what companies are represented by what brokers at any given time. This should be corrected. Some control mechanism must be established, at least to identify brokers who represent no automobile insurer other than a Facility Association servicing carrier.

Brokers selling automobile insurance along with other lines of insurance are located throughout Ontario. There are few communities of any significant size that do not have a local business person engaged in selling general insurance.

A broker may represent any number of regular market automobile insurers. Almost every broker has also accepted the assignment of a Facility Association carrier, thereby giving the broker and his or her customers access to the residual market. The contracts between insurers and brokers are not uniform, although there are typical provisions in every agreement.[27]

Although brokers exercise independent judgment in entering into contractual arrangements with insurers, once an insurer-broker relationship is established, the broker is subservient to the insurer's underwriting policies, and of course, the insurer's rate manual. Premiums received by a broker are held in trust for a 60 to 90-day period. These premiums less the broker's commission are then forwarded to the insurer.

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[27] For a typical contract between an insurer and a broker, see Appendix XIII.

Brokers provide these general services for insurers and consumers:

(1) receive applications for automobile insurance;
(2) exercise underwriting discretion;
(3) accept premium payments or partial premium payments and deposit these payments in trust;
(4) establish insurance policy records for applicants including policy expiry dates;
(5) inform consumers about optional coverage in the following areas:
  (a) bodily injury/property damage limits in excess of the statutory minimum of $200,000;
  (b) collision coverage and the appropriate deductible;
  (c) comprehensive, specified perils and all perils coverage, and the appropriate deductibles;
  (d) uninsured motorist coverage (now SEF 44) (included unless the consumer specifically rejects it);
  (e) any other endorsement coverage;
(6) receive claims information, assist the insured with respect to claims and transmit claims information to the insurer when required.

A consumer dealing through a broker secures access only to those companies the broker represents. That access may be limited to one company, other than a Facility Association servicing carrier, or may extend to a relatively large number of companies. Typically, brokers may represent from three to six insurers. In early 1987 the Superintendent of Insurance prohibited brokers from representing only a Facility Association carrier. This practice had denied the unsuspecting consumer access to the standard or substandard markets. A broker may still represent only one regular market insurer and a Facility Association carrier.

Usually the consumer leaves the decision as to the choice of insurer to the broker. Price is the dominant consumer consideration. Inquiry hearings and miscellaneous consumer inquiries have led me to the conclusion that the consumer/broker contact, as related to automobile insurance, is usually initiated by the consumer, and brokers are often selected without regard to the companies they represent. Most brokers do not advertise or volunteer information on the insurers they represent.

In many instances, consumers are aware of their broker's name, but do not know the name of their automobile insurance company. Consumers dealing with direct writers are more often aware of their insurer's name, but are less likely to recall the name of the agent through whom the insurance was purchased.

The delivery of automobile insurance through brokers is, to say the least, entrenched. Brokers have become an integral and important part of Ontario communities, big and small. There are, however, obvious problems with the system. Very few brokers have come forward to assist in the process of identifying or resolving these problems. Individual brokers have been helpful, but only when asked. As brokers are, and will likely continue to be, an integral part of the automobile insurance delivery system, it is vital that structural weaknesses in the delivery system be repaired.

I think the relative silence of brokers as to existing problems is best explained by the simple observation that independent brokers are not independent once under contract to an insurer. At that point brokers are largely dependent for economic survival on the insurers they represent.

Brokers' commissions vary significantly. Each company has its own commission policy although commissions generally range between 7.5 and 20% of gross premiums. Commissions average about 12%. The larger the premium, the larger the commission. As surcharges are imposed, following an at-fault accident for example, the broker's commission increases. The quantum of the broker's commission is almost never disclosed to the consumer; the consumer knows neither the commission rate nor the variation in commission rates among insurers the broker represents.

Insurers regularly provide incentives and rewards to their brokers. Trips to Hawaii and commission bonuses for reaching a certain volume of business are two examples. Profit sharing incentive plans are also common. One major insurer includes brokers who sell a certain volume of insurance in its pension plan.

The established insurer/broker structure reeks of conflict. The broker often chooses one insurer over another in consideration of a number of factors unknown to the applicant for automobile insurance. For example, incentives provided by an insurer or volume of business requirements imposed by an insurer may affect the selection process from a broker's standpoint.

Although price is the dominant consumer concern, the broker has no obligation to disclose and often does not disclose any competitive premiums, even among those insurers represented by the broker. The result is that in many instances the consumer has limited information about premiums of the broker's other insurers, and no access to information about companies not represented by the broker. The consumer is generally not informed of individual company surcharges and accident forgiveness policies. The insurer's capacity to provide customer service is a matter of concern to some, but not many consumers. When the issue arises, the broker must rate the companies he represents on the basis of customer service.

Brokers' contractual arrangements with insurers are fragile, in the sense that the broker's right to represent an insurer can generally be terminated on relatively short notice. The termination notice period is always provided for in insurer/broker contracts (even if no notice is required). Termination can have a detrimental effect on both the insured and the broker. This has not been a problem for some months because of a 12-month moratorium on broker cancellation declared in December 1986. The moratorium arrangement was entered into by the Insurance Bureau of Canada (I.B.C.) and the Insurance Brokers Association of Ontario (I.B.A.O.). It is interesting to note that this truce coincided with the commencement of this Inquiry and will end at about the time the Inquiry ends. The moratorium on broker cancellation by insurers is obviously not a long-term solution.

There is no doubt that in many instances the cancellation of brokers by insurers is a perfectly reasonable exercise of sound business judgment. Few would argue that an insurer should be forced to remain contractually bound to a dishonest broker; however, brokers are often cancelled for less acceptable reasons. An insurer's termination of its contractual arrangements with brokers typically arises as a result of:

(1) poor loss ratio;
(2) unacceptable mix of business (for example, too few homeowners' policies compared to the number of automobile policies);
(3) the failure to satisfy insurers' accompanying business requirements. In the automobile context, the accompanying business requirement imposes an obligation on the broker to obtain other business from the same insured (e.g., a homeowner's policy) before accepting the insured's automobile business;
(4) unacceptable balance of business (this is the mix of business issue, but assessed from a premium, not a policy, standpoint);
(5) inadequate volume of business.

There are, of course, other reasons that an insurer may see fit to terminate a broker's contract having nothing specifically to do with the broker's activities - for example, solvency rules requiring the insurer to maintain a sufficient surplus to premium ratio may require an insurer to terminate brokers.

When a broker's contract with an insured is terminated by the insurer, there is little problem for the consumer if the broker can arrange coverage with another insurer without an increase in premium. Too often, brokers are unable to arrange this alternate coverage. The problem is particularly acute for insureds who have had accidents within the preceding five years. Other companies are reluctant to assume those risks and if they do, the insured often faces a lower rating and increased premium. I have also been told that following a broker's termination it is difficult to place insureds without accident or conviction records if they happen to be under 25, male, unmarried and if their motor vehicle happens to be what insurers regard as a high risk vehicle.[28] Some insurers will not take on an under-25 unmarried male no matter what type of automobile he drives. The cancellation of a broker may force the insured to "shop". Although "shopping" has been explicitly encouraged, it is only a viable option for those without blemishes on their driving record.

Shopping generally cannot be done by telephone; it requires the applicant's physical presence at the broker's or agent's office. This is time-consuming and effectively limits the consumer's ability to make an informed choice when buying automobile insurance.

No rigid judgments can be made as to the legitimacy of the reasons why insurers terminate their contractual arrangements with brokers. The most suspect reason is loss ratio. A high loss ratio, as assessed within a very small group of insureds over a short time period, may be the result of one or two accidents. Termination of the broker's right to sell insurance for a company in such circumstances is unfair. Unless the broker's loss ratio is measured over an extended period and demonstrates that the broker is accepting business that should not have been underwritten, or is ignoring company underwriting policies, a poor loss ratio is as much attributable to bad luck as bad underwriting by the broker.

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[28] These cars generally fall within the description of sports cars. The most common anecdotal reference is to a Corvette.

If a broker is cancelled on the basis of volume of business, cancellation is almost always preceded by advice from the insurer that it cannot continue to do business with the broker at the established level. This places the broker in an impossible position of conflict. Unless the broker can encourage more people to insure through that company, the broker will lose the right to sell automobile insurance for the insurer. The consumer's best interests may well become submerged in the process. On the other hand, in a free market system, it does not make sense to require an insurer to maintain a contractual relationship with a broker that results in a volume of premium income that is so small as to make the arrangement unprofitable and administratively inefficient. No hard and fast rules can be established, but I will shortly make some recommendations concerning the rights of consumers affected by broker cancellations.

When an applicant for insurance obtains coverage through a direct writer, the consumer deals with what is often referred to as a "captive agent".[29] A consumer dealing with a captive agent has the benefit of knowing at the outset what company contact is being made. The difficulty, from the consumer's standpoint, is that any dealing with a captive agent provides consumers with access to one company and no more. If an applicant for insurance wants information concerning what insurance with another company will cost, he or she has to check with a broker or another captive agent.

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[29] This term is commonly used in the insurance industry to describe employees of direct writers who sell insurance to the public. The Ontario Task Force on Insurance Report adopted this term for agents selling for direct writers.

On the basis that the current delivery system will be subject to relatively minor structural modifications, I make these recommendations:

1. The consumer must be given better access to information on available premiums.[30] Because of the fragmented delivery system, this access must come, at least in part, from outside the system. In Michigan, the consumer information problem is dealt with by the State Insurance Office's publication of typical insurance premiums in the same way (but with less frequency) as mortgage rates are made known to the public. I recommend that at regular intervals throughout the year, the Office of the Superintendent of Insurance publish basic rates of automobile insurance to ensure province-wide exposure.[31] The consumer should also be informed about typical surcharges.

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[30] Ontario Task Force on Insurance, Final Report (1986); Select Committee on Company Law, Third Report (1979); Ontario Law Reform Commission, Report on Motor Vehicle Accident Compensation (1973).

[31] A typical Michigan premium availability notice can be seen in Appendix XIV.

How this information should be assembled can best be considered once decisions have been made as to the existence and form of rate regulation. If the Ontario Government's proposed system of rate regulation is introduced, premium differentials among insurers will be very much narrowed. If that happens, the consumer's access to premium information may simply be accomplished by the publication of the range of rates established by the Ontario Automobile Insurance Board within the prescribed classification system. The more regulated the rates, and the simpler the classification system, the easier it will be to provide the consumer with this necessary information. However this is accomplished, it is important that the public be made aware of what premiums are available.

2. Brokers and agents (most often employees of direct writers) should be required to display prominently the names of insurers for whom they act.

3. Each broker should clearly identify his or her Facility Association servicing carrier.

4. All brokers should be required by statute to provide access to the residual market (the Facility Association) through a designated servicing carrier.

5. Notwithstanding termination provisions contained in contracts between insurers and brokers, in cases other than fraud, dishonesty, etc.,

insurers should be required to give some minimum notice of termination to brokers. Many contracts between insurers and brokers provide for no notice of termination. My concern is not so much with the broker, but with insureds who may be inconvenienced and subjected to increased premiums as a result of an insurer's decision to terminate its contractual relationship with the broker. The minimum notice period should be examined through consultation between insurers and brokers. I am inclined to the view, but stop short of making a specific recommendation, that the minimum notice period be 90 days and that for broker/insurer contracts in place for more than five years, the period be 120 days.

6. Insurers terminating contracts with brokers should be required to give specific reasons for the termination. An arbitration structure through the I.B.C. and I.B.A.O. to deal with broker/insurer disputes, including terminations, should be established.

7. An insurer terminating its contract with a broker because of mix, balance or volume of business, or loss ratio, should be encouraged to enter into a rehabilitation program with the terminated broker. In many American jurisdictions, rehabilitation programs are mandatory. It seems to me that there are too many variables to make rehabilitation programs mandatory, and I stop short of making that recommendation. Instead I recommend that the automobile insurance companies and brokers, together with the Superintendent of

Insurance and R.I.B.O., enter into discussions to establish guidelines for the use of rehabilitation programs, particularly when loss ratio is the basis of an insurer's decision to terminate its contract with a broker. If, after a rehabilitation program has been established, the insurer terminates the broker, notice of the termination should refer to the rehabilitation program and its lack of success.

8. Given the marketplace stigma attached to insureds who have been terminated by an insurance company, care must be taken not to structure a solution which will create incentives for insurers to terminate insureds individually. It is bad enough for an insured to be subjected to the problems associated with a broker cancellation; it is worse to be subjected to the stigma attached to individual termination.

There is no problem for insureds who are placed with another company at no increase in premium. The problem lies with anyone who would not have faced an increased premium but for the broker's cancellation.

While I have grave concern for consumers adversely affected by broker termination, it is easier to identify the problem and the concern than it is to structure the solution. It has been suggested that one solution is to mandate one automatic renewal. This has a simplistic appeal to it. However, it ignores the fact that apart from the broker cancellation, when the insurance contract is at an end, the insurer has no more obligation to the insured than the consumer does to the insurance company. It also ignores the fact that valid reasons may arise, either before or after the broker termination, that justify non-renewal of the insurance contract.

Fundamental to any solution is the disclosure of the facts. Beyond that, it is generally thought that brokers acquire a proprietary interest in the business of the insured. Assuming that to be correct, it would follow that the broker owes a duty of full disclosure to his client. I therefore recommend that upon a broker cancellation, the broker should be obligated to inform the insured that he is no longer acting for that particular company and that if the consumer wishes to continue with that company, the consumer should contact the company to obtain information about other brokers writing its business.

9. The I.B.C., in conjunction with the Canadian Federation of Insurance Agents and Brokers Association, has attempted to address this general problem area by prescribing guidelines for broker terminations. An edited version of these guidelines is as follows:

(1) Where an insurer intends to withdraw from a province or an area within a province or intends to terminate a broker and accordingly does not intend to renew its policies in that province or area or with

that broker, it shall give 90 days' prior notice in writing to its broker, if any, and

a. where the broker, being an appointed representative of one or more other insurers, has a market for and undertakes to replace the policies, he shall, within 15 days of receipt of such notice, inform the terminating insurer in writing of his undertaking to do so, whereupon the agent shall assume responsibility for advising each insured at least 30 days prior to the policy expiry date; or

b. where there is no broker or where the broker is not an appointed representative of another insurer or where the broker does not, within the said 15 days, undertake in writing to replace the policies as provided in sub-clause (a), the terminating insurer shall notify the insured in writing at least 30 days prior to the expiry date of each policy to be lapsed.

(2) Where for reasons other than the foregoing, an insurer does not intend to renew a specific policy, the insurer shall give 60 days' prior notice in writing to its broker, if any, and otherwise notice shall be given in accordance with Clause (1).

(3) Where a broker of his own volition or at the request of an insured, decides to replace an expiring policy with similar

coverage with another insurer, the broker shall notify the existing insurer in writing of such decision, returning the renewal document, if any, and shall advise the insured prior to the policy expiry date.

I endorse these guidelines. The Superintendent of Insurance should carefully monitor broker terminations to ensure these guidelines are being followed and to ensure that insureds will not be unfairly affected by having to pay increased premiums as a direct result of the insurer's termination of a broker. An insured should not be adversely affected by issues having relevance only to a broker and an insurer.[32]

10. A breakdown of an insured's automobile insurance premium payment, including the broker's commission, should be provided in all cases. This breakdown should identify premium payments for coverages purchased in plain understandable language. Assuming the automobile policy structure remains intact, the breakdown should include:

(i) Section A premium;
(ii) Section B premium;
(iii) Section C premium (including the specific coverages secured);

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[32] The guidelines referred to above were circulated among I.B.C. members on September 9, 1987.

(iv) the premium for each endorsement coverage purchased; and

(v) the broker's commission expressed in both percentage terms and dollars.

Brokers have steadfastly and consistently resisted disclosing their commissions. The most common argument advanced against commission disclosure is that others in the sales field are not required to disclose their commission. Individual brokers and the I.B.A.O. cite used car salesmen and sales clerks in retail stores as examples of those who are not required to disclose their commissions. It seems to me that whether or not a used car salesman is required to advise the consumer of the commission he is making on a deal can hardly set the standard. Brokers lay claim to professionalism and are self-regulating. Other self-regulated professions are required to disclose their fees. When the consumer is purchasing what, for the most part, is a compulsory product (Sections A and B of the automobile policy) the consumer is entitled to know what he or she is paying for. The fact that the consumer may be encouraged to ask a few more questions, some of which may specifically relate to the broker's commission, is something which I view as healthy, not something to be discouraged. I note that regulations under the R.I.B.O. Act may require that brokers' fees be disclosed.[33]

11. The Superintendent of Insurance has imposed a cap on brokers' commissions for risks written through the Facility Association. For private passenger automobiles, the commission cap is $150.00. The broker's Facility Association commission is disclosed, but is misleadingly referred to as a Facility Association fee. That would suggest to most consumers that the payment is in the nature of a charge levied by the Facility Association and not the broker. That should be corrected. Alternatively, the cap should be removed and the Facility Association commission lowered. In either event, the commission should be disclosed to the consumer.

12. Since shopping has been encouraged, and insurers recognize the public's need to know available premium rates, brokers should be required, or at least encouraged, to give premium quotations by telephone. Recognizing that certain underwriting information may not be available in a relatively brief telephone interview, these quotations should be non-binding. The broker should, if asked, identify those companies that the broker represents. Access to premium information by

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[33] O. Reg. 637/81, 5-13. The section requires that the broker's fee be disclosed "where a member proposes to charge a fee for service in addition to retaining a portion of the premium charge." R.I.B.O. takes the position the section does not apply to the broker's basic commission.

telephone is important in rural areas, particularly in Northern Ontario where great distances may have to be covered.

13. The R.I.B.O. Act should be amended to specifically prohibit any broker from acting only for a Facility Association servicing carrier. Abuses in this area have been reduced, but probably not eliminated. The Superintendent of Insurance, through R.I.B.O., has implemented a policy prohibiting brokers from acting only for the Facility Association. To ensure compliance, this policy should be the subject of legislation. There is no place for a broker who provides the consumer with access only to the residual market.

14. Banks and trust companies should be entitled to market automobile insurance. This will enhance competition and make automobile insurance available throughout the province. Banks and trust companies are obviously equipped to handle trust monies and will be able to provide the advice that is necessary to sell automobile insurance.

15. Regulations under the R.I.B.O. Act prohibit part-time brokerage activity unless approval is obtained through the Qualification and Registration Committee. There are, in fact, many part-time brokers in Ontario whose part-time activity has not received the approval of the Qualification and Registration Committee. Part-time brokers fulfill a need, particularly in rural areas. The whole concept of prohibiting

part-time activity should be re-examined. In my opinion, the emphasis on making insurance available to consumers, as opposed to reinforcing existing vested interests, should be reinforced.

16. Insurers use a variety of underwriting criteria in exercising a decision as to whether a risk will be underwritten. Some insurers take into account the number of occasions, within a given period (typically three or five years), the applicant for insurance has changed insurers. This obviously discourages shopping; it limits true freedom of choice and deprives the applicant of the full benefits of competition. I recommend that insurers be prohibited from using it as an underwriting criterion. This kind of underwriting practice should be deemed to be unfair and subject to penalty. Unfair claims and underwriting practices will be dealt with in Chapter 13 of this Report.

17. Insureds having a claim against a negligent broker should not be denied compensation from the broker's liability insurer because of policy violations such as the broker's failure to report the claim. The emphasis should be on the equities as between the insured and the broker.[34]

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[34] See Section 106 of the Insurance Act, R.S.O. 1980, c. 218; see also Perry v. Gen. Security Ins. Co. of Canada, 47 O.R. (2d) 472. (A case involving a negligent solicitor who failed to report a claim, with the result that the plaintiff's action against the solicitor's insurer failed).

CHAPTER 5

COVERAGE AND DELIVERY PROBLEMS

A. COVERAGE

The car became established as a major presence in North America in the early 1900s. Injuries and property damage were an immediate consequence. From the beginning, insurance was relied upon to compensate people who suffered loss as a result of the use or operation of a motor vehicle. Problems were soon recognized. In May 1919, this excerpt from a letter to the editor appeared in a Massachusetts newspaper:

> At present, in an effort to redress the wrongs of one who suffers from an accident, the law allows a suit to be brought. This means that the plaintiff must locate witnesses and prove negligence. Both may be difficult or impossible. A law case drags along in court for a year or two, the expenses of lawyers, and of the physicians who testify as to the damages, are large and meantime the victim very likely lacks money when he most needs it. If he is poor, the lawyer has to advance the necessary expenses and he will never get them back, or get anything for himself, unless he settles or wins the case. As it is always uncertain whether he will win, he is under temptation to settle, even for an amount less than the plaintiff ought to have. The refinements that have grown up in the law as to negligence and contributory negligence are hard to understand; they afford grounds for appeals and new trials, and bear only a slight relation to the needs of the situation. In case a judgment is obtained, it may be impossible to collect it, because many people and corporations who run automobiles are financially irresponsible.[1]

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[1] Weld A. Rollins, "A Proposal to Extend the Compensation Principle to Accidents in the Streets," Saturday Evening Record, (Boston, Massachusetts) May 31, 1919.

Automobile insurance was added to the Ontario Insurance Act in 1914.[2] The Act was amended in 1922 to provide detailed provisions on automobile insurance and statutory conditions. In 1930 the Act was further amended to provide that it was the duty of the Superintendent of Insurance to adjust premiums if, after hearings were held, rates were determined to be "...excessive, inadequate, unfairly discriminatory or otherwise unreasonable".[3] This provision has remained in the Insurance Act since 1930 but it has never been proclaimed in force.

Ontario's automobile insurance coverage has always included bodily injury/property damage third party protection. This form of insurance indemnifies the insured from "liability imposed by law" arising out of the ownership, use or operation of the insured vehicle by anyone driving it with the express or implied consent of its owner. Any person driving the insured vehicle with the owner's consent is deemed to be a party to the automobile insurance contract; that person is referred to as an "unnamed insured" under the contract.[4]

In 1932, minimum bodily injury/property damage limits were established at $5,000. Insurance was not compulsory at that time. Nevertheless, anyone who did buy automobile insurance had to purchase third party bodily injury/property damage coverage of at least $5,000.

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[2] S.O. 1912, c. 33, as amended by R.S.O. 1914, c. 30.

[3] S.O. 1930, c. 41, s. 12. Now see Insurance Act, R.S.O. 1980, c. 218, ss. 370 and 371. Section 394 prohibits any person from engaging in "...any unfair or deceptive act or practice in the business of insurance." This section has apparently never been used to address unfair premiums.

[4] Insurance Act, R.S.O. 1980, c. 218, s. 213.

In 1957, the minimum limits were raised to $10,000 per person injured in an accident, subject to an overall limit of $20,000 per accident. The minimum limits were increased to $35,000 in 1966, to $50,000 in 1968, to $100,000 in 1977 and to $200,000 in 1981. Ontario's minimum limits for bodily injury and property damage remain at $200,000.

Minimum limits mean little for a person injured in a motor vehicle accident as a result of another person's negligence, if the defendant wrongdoer has no insurance or assets with which to satisfy the injured person's claim. The first direct response to this problem occurred in 1947. The Highway Traffic Act was amended so as to establish the Unsatisfied Judgment Fund.[5] All licensed drivers paid a stipulated amount to finance the fund. The fund was a source of compensation for plaintiffs awarded damages arising out of motor vehicle accidents if they could not recover money from the owner/driver of the at-fault vehicle either because the owner/driver was unknown or unidentified or impecunious. Bodily injury damages were restricted to the prevailing minimum limits.

In 1962, access to compensation for those not having access to third party insurance or a defendant with assets was provided by the Motor Vehicle Accident Claims Fund.[6]

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[5] S.O. 1947, c. 45, s. 16.

[6] The Fund was created by an Act Respecting Claims for Damages Arising Out of Motor Vehicle Accidents, S.O. 1961-1962, c. 84.

The Fund replaced the Unsatisfied Judgment Fund and was differently financed. Each owner of a motor vehicle had to establish that the vehicle was insured, or if uninsured, that the required fee had been paid. The Fund still exists but its significance has diminished with the advent of uninsured, unidentified motorist coverage, now part of Section B of the standard automobile insurance policy. The Fund now responds to relatively few claims. As can be seen from Table 5.1, the Fund's business has declined dramatically since the 1978-1979 fiscal year when there were 10,097 claims made against it.

TABLE 5.1

CLAIMS AGAINST THE MOTOR VEHICLE ACCIDENT CLAIMS FUND

Fiscal Year	No. of Claims	Payments
1978-79	10,097	$15,941,756.83
1979-80	7,955	16,658,628.85
1980-81	2,671	14,469,524.91
1981-82	1,207	11,830,172.46
1982-83	1,083	13,527,392.36
1983-84	1,259	9,641,042.42
1984-85	813	5,974,868.64
1985-86	706	3,723,423.37

In 1979-1980, $16,658,628.85 was paid out of the Fund. In 1985-1986, the Fund payout was $3,723,423.37. The most common example of the need for the Fund is a pedestrian case in which the injured pedestrian is not at fault and has no access to any automobile insurance policy.

B. THE STANDARD FORM AUTOMOBILE INSURANCE POLICY (1987)[7]

Inquiry hearings and submissions have confirmed the existence of a number of problems within the insurance-compensation system. The most common complaints were about the underwriting practices of some insurers. Failure to provide Section B, no fault benefits, particularly disability benefits (income replacement) and rehabilitation benefits, is also an obvious area of concern. Unrest about the adequacy of third party compensation was minimal. In fact, many of those making submissions to this Inquiry or attending its hearings, expressed shock at what they thought were inordinately high damage awards. Most of those concerned about high damage awards relied on anecdotal evidence. Nevertheless, there is a pervading belief that the injured eligible for compensation through tort law are compensated too generously.

In dealing with problems in the insurance-compensation system, I think it is sensible to start with the automobile insurance policy as a whole and then to deal with specific problems relevant to Sections A, B, and C of the policy.

The automobile insurance policy is divided into three sections. Two of the three sections deal with insurance coverage that is compulsory (Sections A and B). Section C (collision, comprehensive, all perils and specified perils) is optional, although collision and comprehensive coverages are widely purchased. Taken as a whole, the standard form of automobile insurance policy is badly structured and incomprehensible.

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[7] See Appendix X.

For example, the automobile insurance policy contains general provisions, definitions and exclusions, which are supposed to, but do not apply to, the entire policy. Section B of the policy (the so-called no fault section) has its own general provisions, definitions and exclusions. Lest anyone reviewing Section B feel over-confident on that account, it is to be noted that Section B's general provisions, definitions and exclusions do not apply to that part of Section B which deals with the uninsured/unidentified motorist coverage. It is impossible for a consumer to read Section B of the policy and understand it.

Exclusions are sprinkled throughout the automobile insurance policy. From a consumer's standpoint, exclusions are matters of significance. There is little consistency in form, and limited consistency in substance, in the way exclusions are dealt with in the automobile policy. Exclusions applicable to Sections B and C appear in those sections of the policy; that makes sense to me. Exclusions applicable to Section A are not found in Section A, but in the general provisions, definitions and exclusions.

The Section B and C exclusions are puzzling in some respects. Exclusions in both sections purport to deal with the impaired driver. In Section C, which deals with vehicle damage, the exclusions include an insured who drives while under the influence of alcohol or drugs so as to be "incapable of the proper control of the automobile." Section C's exclusions go on to exclude coverage if the insured is convicted of an offence under section 234, 236 or 235(2) of the Criminal Code of Canada. I assume the intent was to deny collision coverage to an insured who has wrapped his car around a tree and who has been convicted of any one of the offences commonly known as impaired driving, exceeding the authorized breathalyzer limit or refusing to take a breathalyzer test. The problem is that these offences are not referred to other than by Criminal Code section number. Two of the Criminal Code section numbers referred to deal with water skiing (section 234) and unseaworthy vessels (section 235), not cars and drivers. The other section referred to (section 236) deals with leaving the scene of an accident. Obviously, the sections of the Criminal Code have been renumbered, but identification of the exclusions has remained unchanged.

Section B's exclusions deny some first party no fault benefits to the insured convicted of drunken or impaired driving. The Section B alcohol-related exclusion does not include the insured who is convicted of driving while having a breathalyzer reading in excess of .08, or an insured who refuses to take a breathalyzer test upon lawful demand. I would have thought that if any no fault benefits are to be denied an insured who is convicted of impaired driving, it would be sensible and reasonable to also deny those benefits to an insured who is convicted of driving with a blood alcohol reading of more than .08 or an insured who refuses to take a breathalyzer test upon lawful demand. As matters now stand, if an insured wants access to first party no fault benefits, and if that insured has a choice, literally any conviction other than impaired driving will do. For example, an insured convicted of criminal negligence causing death will receive no fault benefits. An insured convicted of impaired driving will not, even if the accident was not that insured's fault. I am told that the lack of symmetry between the Section C alcohol-related exclusions and Section B's exclusions is that when Section B was first drafted, the breathalyzer offences (blowing over .08 and refusing to blow) were not part of our criminal law.

The standard form of automobile insurance policy can be conveniently subdivided as follows:

(i) Third party liability protection with minimum limits of $200,000 or such increased limits as the insured decides to purchase. This protection includes an obligation requiring the insurer to defend any claim brought against the insured arising out of the insured's ownership, use or operation of the motor vehicle.

(ii) Section B of the policy provides so-called no fault benefits which include work-related economic compensation to a maximum of $140 a week. Homemakers are modestly provided with $70 a week maximum, subject to a 12-week limitation. Medical, hospital, rehabilitation and retraining expenses are paid through Section B subject to a $25,000 four-year limitation; those who are already covered under O.H.I.P. have all medical/hospital expenses paid without any limitation. Modest death and funeral benefits are provided.

(iii) Section C of the policy provides vehicle damage (collision) coverage. This is first party coverage subject to an agreed deductible. It provides protection against damage occurring as a result of collision or upset and, if agreed to, additional coverage such as comprehensive, specific perils and all perils. This coverage is not compulsory.

(iv) The entire policy is subject to Statutory Conditions. These conditions, as the designation implies, are statutory and are part of the standard automobile policy. The Statutory Conditions apply in their entirety to Sections A and C of the policy. Only Statutory Conditions 1, 8 and 9 apply to Section B. The Statutory Conditions provide a general framework for the policy. The Statutory Conditions include the definition of insured under the policy; the application of Statutory Conditions to Section B; provisions with respect to change in risk; excluded uses by the insured; excluded uses by others; requirements imposed on the insured after a loss; provisions with respect to giving notice of a claim and proof of loss; provisions with respect to termination; and provisions with respect to the manner in which notice is required by the policy may be given.

(v) The automobile policy contains general provisions, definitions and exclusions. Most, but not all of these, apply to the policy as a whole. The general provisions, definitions and exclusions are not to be confused with the Statutory Conditions.

(vi) The policy also contains provisions applicable to each section of the policy. Section A's exclusions are contained within the general provisions, definitions and exclusions part of the policy. In addition to the general exclusions, Sections B and C contain their own exclusions.

(vii) Underinsured motorist exclusions are optional and provided through the SEF 44 endorsement. Uninsured/unidentified coverage (compulsory) is part of Section B, but for a structural analysis, this coverage can best be considered on its own.

(viii) There are provisions in the Insurance Act[8] falling outside the policy which affect the automobile insurance policy. The main statutory provisions requiring comment are the $200,000 minimum third party limits and the requirement that the third party insurer pay up to the minimum limit even if the third party insured is guilty of a policy violation.

(a) Section A (Third Party Liability)

Section A of the standard automobile policy protects the insured, or anyone operating the insured vehicle (the described automobile) with the insured's consent, from liability imposed by law as a result of causing injury or loss to others. The minimum limits of the protection afforded by Section A are $200,000. According to the Insurance Bureau of Canada, the average third party liability protection secured by Ontario motorists is over $500,000. The insuring agreement requires the insurer to defend any action brought against the insured, to pay any judgment up to policy limits and to pay costs even if those costs result in a payment in excess of policy limits.

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[8] R.S.O. 1980, c. 218.

I propose here to deal with some existing problems related to Section A of the policy as it is presently structured. The significance of these problems and any proposed changes will, of course, depend upon changes in the compensation system and policy structure which may be implemented in the future.

As earlier noted, there were relatively few submissions and consumer complaints related to the resolution of bodily injury and property damage claims.[9] Several severely injured motor vehicle accident victims who attended Inquiry public hearings seemed pleased with the system that provided them with access to compensation and with their legal representation. Consumer complaints reviewed at the Office of the Superintendent of Insurance rarely involved third party bodily injury claims.[10]

Property damage claims (aside from relevant deductibles) are mostly resolved by insurers through the fault chart.[11] I do not think consumers recognize the importance of the fault chart beyond its use in determining what part of the insured's deductible will be paid by the collision insurer. The fault chart, as its name implies, is used to determine fault on an arbitrary yet consistent basis. That fault finding leads to the insurer either paying or not paying a vehicle damage claim. If payment is made, the relevant accident becomes an at-fault motor vehicle accident for premium rating purposes. In the long run, premium implications of the application of the fault chart are often more significant than the question of whether an insured will or will not recover part of his collision deductible.

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[9] There were complaints about rehabilitation. However, the third party system is not in general looked to as the source of funds for rehabilitation.

[10] Consumer complaints are logged by computer in the Office of the Superintendent of Insurance. Most involved underwriting-related matters.

A further problem with the fault chart is that insureds have no real access to any dispute mechanism through which to challenge its allocation of fault. In Manitoba, for example, the allocation of fault by the Manitoba Public Insurance Corporation (M.P.I.C.) may be disputed by an insured through the M.P.I.C. directly, or through the Manitoba version of the Provincial Court (Civil Division).

Underinsured (SEF 44) coverage provides compensation where the wrongdoer's policy limits are inadequate. This endorsement coverage is purchased by over 90% of Ontario insureds.[12] Most brokers and direct writers sell SEF 44 coverage unless the consumer rejects it in writing. SEF 44 only has relevance in those cases where the insured purchases more than the minimum third party limits ($200,000). SEF 44 premiums should not be reported under the Statistical Plan as part of Section B premiums, as is now being done.

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[11] The fault chart is reproduced as Appendix XV.

[12] This information comes from the Insurance Bureau of Canada and was generally confirmed in discussion with insurers and brokers.

Some have suggested the $200,000 minimum third party limits should be increased. There are those who recommend unlimited third party liability coverage. Others who support increasing the limits approach the issue by simply selecting a figure higher than $200,000. A number of jurisdictions have unlimited third party limits. Great Britain, for example, has no limit on third party liability. Insurers in Great Britain seem to encounter no problems with this unlimited third party exposure. If third party exposure were unlimited, transaction costs would be lowered; one insurer could respond to all third party claims without concern about policy limits;[13] the first party insurer would not be brought into the claim wearing its SEF 44 hat.

I do not think limits should be open-ended because of solvency considerations. With respect to increasing the limits, cost is a problem which cannot be ignored. Increasing limits will increase premiums. Further, some seem to have a serious problem obtaining automobile insurance now. I think of young male drivers as an example. Their problem will be exacerbated if insurers are forced to sell policies with no third party limits or substantially increased third party limits. On balance, it seems to me that the benefits attendant upon increased policy limits do not outweigh the costs. I therefore recommend that the $200,000 minimum limits continue. Those wishing to receive additional protection can do so by purchasing either additional third party liability coverage or SEF 44 underinsured coverage or both on an optional basis.

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[13] The Superintendent of Insurance is among those who have recommended a limit be placed on all coverage exposures.

I gave serious consideration to recommending SEF 44 coverage be compulsory where an insured has purchased third party limits in excess of $200,000. In the final analysis, I concluded that this might encourage those insureds seriously concerned about cost to secure minimum third party coverage and thus avoid paying the SEF 44 premium. Moreover, almost everyone has SEF 44 coverage now; minimal gains would result from making the uninsured coverage compulsory.

Delay is a problem in the payment of third party bodily injury claims. Most insurers want to close third party bodily injury files quickly. Insurers are frustrated by delay. The root cause of delay, aside from congested court lists in some areas,[14] is the lump sum payment compensation system which requires bodily injuries and disabilities to be stabilized before settlement or trial can realistically be considered. The bodily injury delay problem does not have anything to do with the automobile policy, or for that matter, automobile insurers. For years insurers have recognized that delaying resolution of a bodily injury claim works to their disadvantage. Delay is not a problem in the resolution of property damage claims.

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[14] Better case management is recommended by the Ontario Courts Inquiry. This will help.

The O.H.I.P. Agreement

In Ontario, medical and hospital costs of those injured in motor vehicle accidents are for the most part paid by the Ontario Health Insurance Plan (O.H.I.P.). Before December 1, 1978, health care losses caused by motor vehicle accidents were the subject of case-by-case subrogation within the tort system. Each injured plaintiff was required to include O.H.I.P.'s claim in any action commenced against an alleged wrongdoer. Upon recovery of damages, plaintiff's counsel was required to remit O.H.I.P.'s interest to O.H.I.P., less the solicitor and client fee related to processing of the claim. O.H.I.P.'s right of subrogation was contained in section 35 of the Health Insurance Act, 1972.[15]

Case-by-case subrogation was an expensive exercise. O.H.I.P. maintained a large subrogation department to process each claim. Staff was required to assemble, regularly update and forward O.H.I.P. claims data to plaintiff's counsel. Legal advice was needed to assess files resolved by settlement where liability was not clear. Eventually, the inefficiency of case-by-case subrogation was recognized by insurers and the provincial government. Steps were taken to establish a simpler and less costly way of recovering motor vehicle accident-related health care costs. In 1978, the provincial government (O.H.I.P.) and most insurers entered into the 1978 Bulk Subrogation Agreement.[16]

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[15] R.S.O. 1972, c. 91, (now Health Insurance Act, R.S.O. 1980, c. 197).

O.H.I.P. and most of the automobile insurers in the province agreed that after November 30, 1978, they would abandon case-by-case subrogation and deal with O.H.I.P. claims on a bulk subrogation basis. Under the agreement, a formula based on a percentage of each insurer's third party liability (Section A) premiums was established to indemnify O.H.I.P. for health care costs incurred as a result of motor vehicle accidents.[17]

In 1978, O.H.I.P. estimated that its motor vehicle accident subrogation claims revenue was "... approximately 2% of the gross automobile third party liability premiums payable to the insurer ...". This conclusion provided the basis for the insurers' payment under the Agreement.

It must have been assumed that the amount O.H.I.P. was recovering in case-by-case subrogation provided an appropriate base for calculation purposes. This is questionable, as it is likely that O.H.I.P.'s gross subrogation receipts, before November 30, 1978, fell short of indemnifying O.H.I.P. for motor vehicle-related losses caused by "... the negligence or other wrongful act or omission of another ...".[18]

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[16] The provisions of the agreement have resulted in the insurers now paying 2.4% of "gross premiums". See Appendix XI.

[17] In the 1978 O.H.I.P. Agreement, there is a reference to "gross premiums". However, the agreement defines gross premiums as gross third party liability premiums. The quotation comes from the first recital to the 1978 Bulk Subrogation Agreement.

The concept of bulk subrogation is sound. The O.H.I.P. agreement has resulted in significant cost savings and it should be continued. O.H.I.P.'s main goal of "...simplifying their administrative procedures and of reducing their administrative costs ..."[19] has been achieved. O.H.I.P.'s subrogation-related administrative costs have been substantially reduced; its subrogation staff has decreased from 67 in 1978 to 16 in 1987. Insurers are no longer exposed to claim-by-claim O.H.I.P.-related transaction costs. The only obvious loser in the deal was that part of the Bar involved in motor vehicle accident litigation. Lawyers acting for plaintiffs regularly billed O.H.I.P. on a percentage basis for collecting O.H.I.P. losses within litigation undertaken on behalf of an injured plaintiff. On occasion, O.H.I.P. was required to retain counsel to exercise its right of subrogation when an injured person did not make a claim. Defence counsel had to deal with O.H.I.P. claims and costs necessarily rose. O.H.I.P.'s claim became part of the settlement negotiation process. Costs paid on settlement were increased, as those costs were usually established as a percentage of the total settlement figure. The presence of O.H.I.P.'s subrogated claim increased the base settlement figure and the cost entitlement of plaintiff's counsel.

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[18] This comes from the first recital in the 1978 Bulk Subrogation Agreement. In many cases, O.H.I.P. settled for less than the full amount of its cost. Other claims were not reported.

[19] O.H.I.P. Agreement, p. 2, Appendix XI.

Not all automobile insurers licensed to carry on business in Ontario are signatories to the 1978 O.H.I.P. agreement. All non-signatory insurers are small companies. When non-signatory insurers are involved, O.H.I.P.'s claims are dealt with on a claim-by-claim basis. There are no data available from which to estimate what O.H.I.P. is losing by the non-reporting of claims in which it has an interest and the defendant is insured by a company outside the agreement. It is probable that some losses are occurring. O.H.I.P.-related transaction costs are increased by this continuing need for some case-by-case subrogation.

Some insureds have established special arrangements with their automobile insurer that inevitably result in O.H.I.P. being shortchanged under the 1978 Agreement. Several large companies prefer to be virtual self-insurers.[20] I have not examined those arrangements in detail. It is clear that a number of large companies comply with the Compulsory Automobile Insurance Act by obtaining the required automobile insurance policy coverage (often with minimum limits).[21] The policy obtained is a fronting policy only. The insured and the insurer enter into a collateral agreement, often by endorsement, whereby the parties agree to a large third party deductible.[22] The arrangement in substance is one of complete self-insurance. The insurer is contractually bound not to pay claims, and is paid an extra premium to process claims for its insured.

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[20] The Toronto Transit Commission, Bell Canada, Canadian National and Canadian Pacific Rail are, or have been, good examples of companies which have entered into some kind of special arrangement with an automobile insurer.

[21] R.S.O. 1980, c. 83.

There would not be a problem if insureds with special automobile insurance arrangements dealt directly with O.H.I.P., or if an adjustment were made at the insurance company level to ensure appropriate payment in lieu of O.H.I.P.'s original file-by-file subrogation, but this is not happening. If an insurer has entered into an agreement with an insured which has the effect of artificially reducing the gross premium, O.H.I.P. loses money. An example will illustrate how this occurs. In 1980, the Toronto Transit Commission (T.T.C.) was insured with Commercial Union. All T.T.C. vehicles were covered by the policy. The policy provided coverage for $200,000, but endorsements diluted the insurer's obligation to the point where the T.T.C. was essentially a self-insurer. The total premium, for the cosmetic coverage established, was $2,500. Without the special arrangement, the T.T.C. premium would have been closer to $1 million. O.H.I.P.'s entitlement under the Bulk Subrogation Agreement was based on the prevailing 1980 percentage of the $2,500 premium. The T.T.C. obtained the advantage of bulk subrogation at virtually no cost.

Under the Bulk Subrogation Agreement, for the years 1983 to 1986, O.H.I.P. received:

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[22] This results in the insured self-insuring losses up to the deductible.

1983	$21,188,321.88
1984	$22,374,074.00
1985	$24,764,344.00
1986	$29,052,277.00

O.H.I.P. still subrogates on a case-by-case basis where motor vehicle claims involve underinsured claims (SEF 42 or SEF 44), or uninsured/unidentified motorist coverage (part of Section B of the automobile policy). This requires O.H.I.P. to monitor those claims, particularly when claims for future care costs involve in-hospital future care and, therefore, O.H.I.P.-related future care expense. In underinsured cases, which by definition involve cases where the damages are more than $200,000 (the statutory minimum limit), future care costs are sometimes substantial and involve O.H.I.P. O.H.I.P.'s future care cost interest is both different and separate from other aspects of future care costs, in that O.H.I.P.'s share of the capital sum, established to provide future care cost compensation, need not be, and should not be, grossed-up to take into account the taxation of the income earned on the investment of that capital sum. In some cases, O.H.I.P.'s assessment of the amount it will require for the plaintiff's future care may be different than the opinion of either the injured plaintiff or the defendant.[23] In those cases, O.H.I.P. must retain counsel to place its position before the court.

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[23] For example, in a recent case, O.H.I.P's estimate of a severely injured plaintiff's life expectancy was less than the life expectancy estimate proffered by the expert witnesses for the plaintiff and defendant.

Although I am strongly of the view that the O.H.I.P. Bulk Subrogation Agreement is in the best interest of O.H.I.P., insurers and the public, I have the following recommendations with respect to it:

1. The structure of the Agreement, established almost ten years ago, should be examined to ensure that O.H.I.P., through bulk subrogation, is paid whatever health care costs to which it is entitled as a result of motor vehicle-related accidents, with transaction costs savings being shared by the parties to the agreement on an equitable basis. The Agreement's underlying assumption was that O.H.I.P. was receiving appropriate reimbursement through claim-by-claim subrogation. Its structure has resulted in losses that O.H.I.P. was not recovering in case-by-case subrogation, due, for example, to non-reporting, being forever buried. The question is whether 2.4% of gross premiums, as defined by the 1978 Agreement, is adequate. Should the percentage, or the definition of "gross premiums", be altered? This will require an assessment of what motor vehicle-related health care costs O.H.I.P. is incurring and what part of those costs could be recovered if claim-by-claim subrogation was fully asserted. Care should be taken to avoid expending unnecessary funds on an expensive audit of the 1978 Agreement. Review of the Agreement will at best result in arriving at a reasonable estimate.

2. There is no merit in leaving even small insurers out of the bulk subrogation arrangement. All

insurers should be deemed to be part of the 1978 O.H.I.P. agreement, or any successor agreement. This will bring any new insurers into the contract once they become licensed to sell insurance in this province. Bringing all insurers under the umbrella of the O.H.I.P. Bulk Subrogation Agreement can be done by amendment to the Insurance Act,[24] and as a condition of licensing.

3. Although my mandate does not extend beyond automobile insurance compensation issues, I think that consideration should be given to expanding the concept of the 1978 Agreement to include other claims (e.g., medical malpractice) where O.H.I.P.'s subrogation is on a case-by-case basis. This will work to reduce health care costs in a modest way.

4. Where future care costs are established at trial, or by settlement (whether or not the settlement is structured), O.H.I.P.'s interest, if any, in the future care costs should be identified by the trial judge, or by the settlement documentation. Section 39 of the Health Insurance Act[25] imposes an obligation on trial judges to identify O.H.I.P.'s interest in the judgment "... if the evidence permits...". Trial judges should be reminded of the requirements of section 39 and a similar provision should be added to section 39

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[24] R.S.O. 1980, c. 218.

[25] R.S.O. 1980, c. 197.

requiring settlements in those cases not covered by the 1978 Agreement to identify O.H.I.P.'s interest. The present value of O.H.I.P.'s future care cost interest should be paid to O.H.I.P. The same might be said for expenses incurred by any other government agency if a third party recovery has been effected. All elements of a future care cost settlement or judgment should be specifically identified.

5. A study should be undertaken to determine if the first party underinsured (SEF 44) and unidentified/uninsured coverages should be brought within the O.H.I.P. Agreement so that there would no longer be claim-by-claim subrogation in cases where those coverages are applicable. Premiums levied for underinsured and unidentified/uninsured coverages would have to be considered, but that is not the central issue. The essence of the undertaking is to assess whether money is being wasted on case-by-case subrogation in underinsured and unidentified/uninsured motorist cases. If it is, and if efficiency can be achieved by expanding the Bulk Subrogation Agreement, that step should be taken. Whether this is done by factoring in a percentage of SEF 44 premiums and the Section B premium attributable to unidentified/uninsured motorist coverage, or by simply adjusting the percentage of the third party liability premium paid by the insurers, is an issue which should be examined by the Ministry of Health and the insurance industry. As matters now stand, the unidentified/uninsured premium is part of the

Section B premium; SEF 44 coverage, although provided by endorsement, results in a premium payment which is required by the Statistical Plan to be recorded with the Section B premium.

6. Any insured and insurer entering into an agreement whereby the issued policy is a fronting policy, or where any endorsement or other agreement results in the insured being a self-insurer, should be required to report the existence of such an arrangement, and its terms, to the Superintendent of Insurance. The insurer and the insured should jointly be required to pay the amount O.H.I.P. would otherwise have received had the special arrangement not been entered into. In the event that O.H.I.P., the insurer and the insured cannot agree, the Superintendent of Insurance should have the authority, after consulting those involved, to deem a premium, if practicable, in order to establish the base for the application of the O.H.I.P. bulk subrogation percentage factor (now 2.4%). Alternatively, O.H.I.P. should have a right of subrogation on a case-by-case basis in those circumstances where the insured is a self-insurer. In that event, some credit would have to be given in recognition of the fact that O.H.I.P. would have received a percentage of the premium reduced by the deductible or fronting policy arrangement. These solutions are imperfect, but they are better than ignoring the problem.

7. Tighter controls should be imposed to ensure that cases which should be processed through the

Workers' Compensation system are not processed through O.H.I.P. Apparently, it is administratively easier to ask an injured worker for his O.H.I.P. number and to short circuit the more cumbersome Workers' Compensation system in that way. This does not result in an increase in costs, but rather a misallocation of costs which should be corrected.

8. Any other government ministries expending funds for those injured by accident should be required to determine and record the cause of the accident. To the extent that the resulting expense is related to motor vehicle accidents, subrogation can then be considered. Subrogation rights are infrequently exercised now in part because no record is kept of the cause of the injured person's disability. Subrogation rights cannot be considered, let alone exercised, if the identification of the nature of the occurrence giving rise to the expenditure is not made. O.H.I.P. is capturing this kind of data; other ministries are not.

(b) Section B (No Fault Benefits)

In 1960, the Select Committee on Automobile Insurance received representations from the All Canada Insurance Association recommending the introduction of no fault benefits in Ontario. In 1961, the Select Committee tabled an interim report recommending the inclusion of no fault benefits in the standard form of automobile insurance policy.

Having been recommended by a Select Committee of the Legislature in 1961, in 1969, no fault benefits were introduced as an optional part of the standard automobile policy. In 1972, the existing no fault benefits became compulsory for those who chose to purchase automobile insurance. The 1969-1972 no fault benefits provided non-primary no fault disability benefits of $70 a week maximum. Medical and rehabilitation benefits were $5,000. The no fault death benefit ranged from $500 for the death of a child under five to $5,000 for the death of the head of a household. Five hundred dollars was allowed for funeral and burial costs. A no fault homemaker's benefit, designed to provide financial assistance in cases where housekeeping services had to be replaced, was set at $35 a week maximum.

In 1978, largely in response to the comprehensive report of the Legislature's Select Committee on Company Law, the no fault benefits were increased as follows:

ACCIDENT BENEFITS	COMPULSORY
DEATH BENEFITS:	
- Head of household	$10,000
- Spouse (no age limit)	$10,000
- Dependent child	$ 2,000
- Each dependant beyond first (no limit)	$ 1,000
- Time limit	2 years
FUNERAL EXPENSES	$ 1,000
MEDICAL, HOSPITAL, REHABILITATION EXPENSES:	
- Amount	$25,000 excluding O.H.I.P.
- Time limit	4 years
PARTIAL DISABILITY:	
- Income	80% of gross wages to maximum $140 per week
- Time limit	2 years
TOTAL DISABILITY:	
- Income	80% of gross wages to maximum $140 per week
- Time limit	Unlimited
REPLACEMENT SERVICES:	
- Homemaker benefits	$70 per week
- Time limit	12 weeks

Ontario's no fault, Section B coverage has not been changed since 1978. The view that the no fault benefits should be increased is almost unanimously held.[26]

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[26] A very small number of those making submissions to this Inquiry suggested enriched disability income benefits would provide a disincentive for an injured person to return to work. This concern relates only to the suggested increase in the maximum $140 per week disability benefit.

The no fault disability benefits coverage contained in Section B of the standard form of automobile insurance policy is not primary; collateral source payments are either deducted or prorated. The following example of the treatment of collateral source payments in the calculation of an insured's entitlement to disability benefits illustrates how some typical collateral source payments are deducted and others prorated:

> **EXAMPLE**
>
> The injured person earns $300 a week and receives the following payments after the accident:
>
> (a) $125 a week through his or her contract of employment;
>
> (b) $75 a week through U.I.C. Sickness (Accident) coverage;
>
> (c) $180 a week under a private sickness and accident policy;
>
> (d) $125 a week from an automobile club insurance scheme.
>
> (Total collateral source payments: $505 a week.)

There is no collateral source deduction in the first two weeks. The injured person referred to above will receive $140 a week for the first two weeks of disability. After the first two weeks of disability, collateral source payments are taken into account; the calculation of the insured's disability benefit entitlement is as follows:

(a) Take 80% of the insured's gross wage of $300 a week ($240).

(b) Deduct the U.I.C. benefit ($75) and what the insured received under his contract of employment ($125).

Total deduction: $200.

Income loss for disability benefit calculation is $40 ($240-$200).

The $40 base income loss results from the direct deduction of the U.I.C. and contract of employment collateral source payments. The injured person's payments under the two privately-arranged coverages (the sickness and accident policy and the automobile club policy) are not deducted. These payments are prorated once the base income loss calculation ($40) has been established:

$$\frac{\text{Gross wages - (U.I.C. + Employment benefits)}}{\text{Income Loss + (private sickness and accident benefits + auto club benefit)}} \times 40$$

OR

$$\frac{300-(75+125)}{40+(180+125)} \times 40 = \$11.59$$

In the above example, the injured person would be entitled to a Section B disability benefit payment of $11.59. After the first two weeks of disability, he or she would receive $516.59 while disabled, subject to income tax deductions from the receipt of U.I.C. benefits and group insurance benefits from employment.

To be eligible for disability benefits, the insured must have been employed or be deemed to be employed. To be deemed to be employed, the insured must be 18 or over and under 65 and must have worked six months out of the previous twelve.

There are two standards of disability. For the first 104 weeks, the injured person must suffer "...substantial inability to perform the essential duties of his occupation or employment ...". After 104 weeks, a different standard of disability applies. To be eligible for further disability benefits, the insured must establish that "...such injury continuously prevents such person from engaging in any occupation or employment for which he is reasonably suited by education, training or experience ...".[27] The insured who passes this test is entitled to disability benefits for life if he or she remains totally disabled in accordance with the above definition of total disability.

The no fault section of the standard form of automobile insurance policy also provides a homemaker's benefit of $70 a week for 12 weeks. This benefit is payable only if the homemaker, male or female, is unpaid, resides in the household, is not engaged in employment for wages or profit and is "completely incapacitated and unable to perform any of his or her household duties." The homemaker need not be related to the insured.

The medical, hospital and rehabilitation benefit is limited by time and amount. The expense must have been incurred within four years of the accident and is limited to $25,000. In practical terms, O.H.I.P. absorbs all medical and hospital expenses and all in-hospital rehabilitation expenses. O.H.I.P. also pays for any in-hospital dental care. The medical/rehabilitation part of the Section B no fault package requires the insurer to pay "reasonable expenses incurred" within four years of the accident. The expenses covered by the policy provision are expenses "...essential for the treatment or rehabilitation of such person ...". Chiropractic and dental expenses are included, as is coverage for occupational retraining, often done through government or community agencies, at no cost to the insurer. Ontario courts have held that the cost of transportation to receive medical treatment, if both necessary and reasonable, is recoverable under this part of the Section B coverage.[28]

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[27] The disability standards are referred to in the standard form of automobile insurance policy Section B and s. 233(1).

Death benefits are payable only if death occurs within 180 days of the accident, or within 104 weeks if the insured was continuously disabled throughout the period. The amount of the death benefit depends upon the status of the deceased and eligible beneficiaries at the time of the accident. If the deceased is the head of the household, or the spouse of the head of the household, the death benefit is $10,000. If there is one dependant other than the surviving head of the household or spouse of the head of the household, that dependant receives $2,000. If there are other dependants beyond the first, those dependants are entitled to $1,000, but only in the event that the deceased is the head of the household.[29]

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[28] Carroll v. Citadel General Assurance Co., [1983] I.L.R. 1-640 (Ontario Div. Ct.).

[29] For a consideration of issues relating to the meaning of head of the household, the spouse of the head of the household, spouse, dependant and household, see J. Newcombe, The Standard Automobile Policy Annotated (Toronto: Butterworths, 1986).

EXAMPLE

If the deceased is head of the household, and if the claimants include a spouse, two dependent children and a dependent mother-in-law, the following death benefits would be paid:

(a) $10,000 to the spouse of the deceased head of the household;

(b) $3,000 to the two children and the mother-in-law (three dependants);

(c) $1,000 funeral.

Total: $14,000 paid to the spouse of the head of the household.

Problem Areas

(i) Rehabilitation

There is a problem with both the looseness of the definition of rehabilitation and its interpretation. The result is that many contractually entitled to rehabilitation are not receiving it.

Rehabilitation, as covered in Section B of the policy, relates, in practical terms, to out-of-hospital rehabilitation and, in my view, is intended to cover vocational and physical rehabilitation. O.H.I.P. looks after in-hospital medical and rehabilitation-related expenses. O.H.I.P. coverage is universal. The provisions of Section B make medical rehabilitation benefits secondary to any other available benefits. Generally speaking, there are no problems with medical and health care expenses. Out-of-hospital rehabilitation, however, is another matter.

Subsection (1) of Section B deals with rehabilitation in such a way as to require that the insured incur a rehabilitation expense before the insurer is required to make payment. While some recent cases suggest otherwise,[30] insurers generally have viewed the contractual obligation to pay first party rehabilitation benefits as an obligation which crystalizes only upon the rehabilitation expense having been incurred. This is destabilizing. It results in delayed or no rehabilitation. Many injured persons understandably want to know if their insurer will pay rehabilitation expenses before the expense has been incurred. Moreover, rehabilitators have more than a passing interest in whether they will be paid for their work.

All submissions relating to rehabilitation suggested that rehabilitation must be undertaken at an optimum time (usually early) to be most effective. The system has not properly responded to the rehabilitation needs of those injured in motor vehicle accidents who reasonably require out-of-hospital rehabilitation. Some rehabilitators rhetorically refer to the no fault rehabilitation benefit as the no-pay rehabilitation benefit.

The existing rehabilitation benefit is badly structured in another area. The insurer's "medical advisor" seems to have a veto power over proposed rehabilitation; in the absence of agreement, the insurer's medical advisor must be brought into the rehabilitation debate before rehabilitation is undertaken. The insured can sue; however, this process is slow and costly and as a result mitigates against effective rehabilitation. It seems to me that the emphasis is somewhat misplaced. The injured insured's medical advisor's opinion as to rehabilitation and the opinion of rehabilitation counsellors should be of primary evidentiary significance. The insurer, through its medical advisor, should not have prima facie veto rights. The insurer should be required to absorb the expense of rehabilitation pending resolution of any dispute. From the standpoint of both the insurer and the insured, this will require a more efficient process of resolving no fault disputes. This issue will be discussed in Chapter 13.

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[30] See for example Macdonald v. Travelers Indemnity Co. of Canada (1987), 60 O.R. (2d) 385 (H.C.).

Unfortunately, very few insurers recognize the cost effectiveness of rehabilitation. The four-year rehabilitation time limitation contained in Section B seems to have encouraged some insurers to ignore rehabilitation in the hope that its direct costs will simply disappear. Other insurers recognize the potential for cost savings in Section B disability benefits (which may continue for life) if rehabilitation results in the injured insured being able to return to work.

The existence of a tort system claim often means the insured will be represented by a lawyer. Insurers suggest that the end result is that rehabilitation, in some cases, becomes submerged beneath a concern about developing tort system damages. Professor Ison has correctly noted that in any system where there is a tendency for non-pecuniary general damages to increase with time off work, there will be a disincentive to embark upon a rehabilitation program and, hence, to return to work.[31]

The existing medical rehabilitation benefit is limited by time and amount. The expense must be incurred within four years of the accident and is limited to $25,000. The timeframe unfairly shrinks when there is delay in determining what, if any, rehabilitation program will be undertaken. I.B.C. data suggest that very few cases have involved rehabilitation expense of more than $25,000.[32] That, however, is far from conclusive evidence as to the adequacy of the $25,000 rehabilitation limit.

Head and spinal cord injuries often attract substantial rehabilitation costs. Children with head injuries seem to be the main problem. The rehabilitation process in head injury cases, particularly involving children, may go on for many years. The Ontario Head Injury Association suggests that rehabilitation may continue for as long as 15 to 20 years in some cases.[33] Temporal and quantitative limitations on rehabilitation expense (Section B) should be made less onerous. I repeat, however, that the main problem is not the $25,000 four-year limitation, but the availability of the benefit.

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[31] Terence Ison, "The Therapeutic Significance of Compensation Structures," Can. Bar Rev. 64, no. 4 (1986): 605.

[32] I.B.C. data indicate that the $25,000 four-year limitation is reached in about 30 cases per year or in approximately 0.1% of the cases in which Section B medical payments were made.

[33] In the vast majority of cases involving young children injured in motor vehicle accidents, the injured child has some access to third party tort system compensation. Most injured children are passengers and will have a cause of action against someone.

It is apparent that better coordination of medical and rehabilitation no fault resources is needed. More, not less, of the disability dollar should go to rehabilitation in those relatively few, but serious cases, in which rehabilitation would be of assistance to the injured person.

The present system lacks an effective dispute resolution mechanism. This comment applies to Section B as a whole, not just to rehabilitation. Too often, rehabilitation proposals made by insureds or their representatives go unanswered. Too often, rehabilitation is delayed while awaiting the consultation and report of the insurer's medical advisor. Too often, the insurer's medical advisor is not equipped by specialty training to deal with rehabilitation-related issues. The net result is that rehabilitation is not undertaken or is undertaken so long after the accident as to limit its effectiveness.

Rehabilitation has been relegated to the position of a footnote in the standard automobile policy. It cannot be allowed to remain there. Changes in the structure of the rehabilitation benefit will be specifically addressed in Chapter 12.

(ii) Disability Benefits

Although the disability benefit is part of the compulsory accident benefits coverage (Section B of the automobile policy), there is no doubt that many who must pay the Section B premium will have little or no need for

Section B's disability benefits. Those who are unemployed or those who have wage-continuation plans will have limited or no entitlement to disability benefits. Except for the "deemed to be employed" as defined in Section B, in order to receive disability benefits, the insured must have a loss of income from employment.[34]

The $140 a week maximum amount was established in 1978 and has not changed since then. The benefit is now less than the minimum wage. Almost all who made submissions to this Inquiry recommended that the $140 a week benefit be increased. Aside from the obvious inadequacy of the benefit which I consider in Chapter 12, the main problem is the delivery of the benefit to those entitled to it. The insurance industry's performance in this area is nothing short of abysmal. I concede at the outset that there are some insurers who do deliver disability benefits reasonably promptly; most do not. Part of the problem lies in the documentation which must be submitted to the insurer. Three forms must be completed. One has to be completed by the insured, one by the insured's doctor and the third by the insured's employer. If there is delay in completing any of these forms, payment of disability benefits is delayed. Once the forms are completed and in the insurer's hands, there is a processing delay on too many occasions. Insurers are not consistent in their requests for medical information. Some insurers seem to require medical reports even in cases where it is obvious that the insured is unable to return to work because of accident-related injuries. When these unreasonable requests for medical information are advanced, costs rise and delay results.

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[34] The benefit is non-primary.

There are gaps in the definition of those who are entitled to disability benefits. As stated previously, those who lose income from employment, subject to the availability of collateral sources, receive disability benefits. An unemployed insured, unless "deemed to be employed" under the provisions of the policy, is not entitled to disability benefits. To be deemed to be employed, an insured must be 18 or over and under 65 and must have worked six months out of the previous twelve. I question the rationality of excluding 16 and 17-year-olds who are able to drive and work, and who may well qualify under the deemed to be employed provision but for the age 18 restriction.

Students generally are not entitled to disability benefits. Occasional workers are not entitled to accident benefits unless they happen to fall within the policy definition of "deemed to be employed". The temporarily unemployed have no access to disability benefits unless they are deemed to be employed.

A person who is deemed to be employed at the time of an accident is entitled to disability benefits. Disability benefits for the deemed to be employed (as do all disability benefits) commence on day one and are paid for the first two weeks without any collateral source deduction. There is no distinction in substance under the present policy structure between an injured person who has actual employment income and an injured person who does not, but is "deemed to be employed". It strikes me that there is something structurally illogical in treating the employed and those deemed to be employed similarly. Does it make sense to pay an income replacement benefit from the day of the accident to an injured person who does not have employment and, hence, does not have any employment income to lose, at least in the short term? I think not. On this basis, there should be some waiting or deductible period for the deemed to be employed before payment of income replacement benefits commences. The case for a disability benefit waiting period for the employed is different and will be discussed in Chapter 12. I hasten to add that there is a distinction between an injured person who has a contract of employment, but has not yet started to work, and the deemed to be employed. Upon being injured, the former is treated as having lost employment income for disability benefit purposes as of the date employment would have commenced.

The standard of disability required for disability benefits for the first two years seems to have worked reasonably well. Problems, however, seem to have arisen in dealing with the transition from the disability definition during the first two years to the disability definition from that time on. Insurers are, perhaps, understandably cautious in commencing accident benefit payments after the 104th week. A number of cases have been brought to my attention in which disability benefits were terminated shortly before or at the 104th week, pending the results of examination by the insurer's medical advisor. In one case disability benefit payments stopped in January 1987, approximately two years after the accident, and the insurer's medical examination was scheduled for November 1987. This is hardly a recipe for stability, if that was what was intended by the payment of disability benefits in the first place.

Currently, the certification of disability for disability benefit payment purposes must be provided by a medical doctor. If the insured has been treated by a chiropractor, the necessity of involving a medical doctor for certification but not treatment purposes, causes delay and extra expense. If the insured has sustained a soft tissue injury, for example, and has chosen to be treated by a chiropractor, as long as the insurer has a right to a medical examination, I fail to see why the insured should be forced to go to a medical doctor, not for treatment, but for the singular purpose of having the doctor certify that the insured is unable to work. If the insurer questions a chiropractor's opinion, it has a right to demand a medical examination. This is a sufficient control device.

The 30-day return to work relieving provision contained in Section B of the policy is clearly better than nothing, but is too short. The purpose of this provision was to permit an insured receiving disability benefits to return to work without thereby sacrificing the insured's right to disability benefits in the event that the insured was unable to perform the essential duties of employment. Everyone seems to agree that it is in society's interest, the insurer's interest and the insured's interest that those injured in motor vehicle accidents return to work as soon as is reasonably possible. The 30-day return to work provision provides a disincentive to returning to work. Although some limitation may be desirable for purposes of finality and certainty, the period should be longer than 30 days. The courts have not favoured insurers in interpreting what is meant by the 30-day return to work clause;[35] nevertheless the wording of the policy in this regard should be made more generous to avoid decisions inconsistent with the purpose of payment of disability benefits and the return to work provision. It should be made clear that return to any employment, not just original employment, comes within the relieving provision; any return to work, including part-time work, should be encouraged, not discouraged.

In addition to there being no expeditious dispute resolution mechanism built into the automobile policy, there is no effective internal or external disciplinary mechanism which would provide insurers with an incentive to extend disability benefit payments to insureds entitled to them without undue delay. Some American jurisdictions have approached this problem through the provision of statutory interest penalties; others have legislation dealing with statutorily-deemed unfair claims practices with monetary penalties.[36] In Ontario, the insured's remedy is to sue. This is an expensive exercise given the fact that in the case of disability benefits, the maximum weekly benefit is $140. In most instances, there is not enough at stake to justify an insured retaining a lawyer to prosecute the insured's claim against the insurer. More effective ways to resolve no fault benefit disputes have to be considered. Aside from the means by which disputes are to be resolved, specific standards have to be established for both insurers and insureds. Interest penalties such as those used in Michigan, are not sufficient in my view, because of the relatively small sums which are often involved.

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[35] See Clark v. State Farm, [1982] I.L.R. 945; Matthews v. Co-Operators Insurance, [1985] I.L.R. 7231.

[36] All threshold no fault states (e.g., Michigan, Minnesota, New York and Florida) have some legislation through which penalties are imposed for non- or delayed payment of benefits.

(iii) Death and Funeral Benefits

The death benefit is primary. It does not take collateral sources such as life insurance into account. Most concede that the death and funeral benefits are too low.[37] The amount of the death benefit is not directly limited to death-related economic loss. It is difficult to structure a no fault death benefit without considering the basis in principle for the benefit. The I.B.C.'s proposed death benefit, unlike the death benefit in the current policy, is structured so as to be related to the deceased's income.[38] The greater the deceased's income, the greater the benefit. It seems to me a policy decision has to be made as to whether the no fault death benefit should be structured so as to replace pecuniary loss arising from death, or to recognize the value of life in some tangible, yet arbitrary and consistent way. The difficulty with an income-related death benefit is that, particularly if collateral sources such as life insurance are not taken into account, no fault death benefits may be paid to those who will need them least.

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[37] There are those who are of the view that automobile insurance no fault benefits should not contain a death benefit. In general terms, the rationale is that protection for economic loss arising from death should be secured by privately arranged or group life insurance.

[38] See I.B.C. submission, page 11. The maximum death benefit proposed by the I.B.C. is $62,400. For a further discussion of the I.B.C. proposal, see Chapter 12.

If the death benefit is to be structured to replace pecuniary loss, at least in the case of the death of an income earner, it seems to me that to be realistic the death benefit has to be substantially higher than is recommended by the I.B.C. On the other hand, if the death benefit is meant to provide some financial assistance to defined survivors without a policy-based emphasis on pecuniary loss, the death benefit can be more modest.

There is an inconsistency between the Section B definition of spouse for death benefit purposes and the Family Law Act[39] definition of spouse. Consistency in this area is desirable.

It is common ground that the funeral benefit is too low. If a specific benefit is to be paid for funeral and burial expenses, that benefit should bear some reasonable resemblance to the cost of a modest funeral. The $1,000 benefit does not accomplish that goal.

(iv) Exclusions

It is difficult to understand the rationale underlying the Section B no fault exclusions. Section B benefits are advertised as no fault benefits. Yet a conviction for impaired driving works to exclude the insured from medical, rehabilitation, loss of income and, strangely, funeral benefits.[40]

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[39] S.O. 1986, c. 4.

[40] I can concede there will be a somewhat rare case where an insured is in an accident, convicted of impaired driving, and then dies. Defined survivors will be

It seems to me that the no fault benefits contained within the automobile policy should be just that -- no fault benefits. The driving related exclusions should cease to be part of Section B. The policy decision to ignore driver negligence for the purposes of no fault benefits must be premised on the recognition of the need for at least some no fault compensation for death or injury as a result of motor vehicle accidents regardless of driver conduct.

Family members are often affected. It is in society's interest that all injured in automobile accidents be rehabilitated and provided with some stabilizing economic assistance, and that the families of those killed receive reasonable death and funeral benefits. It does not make sense to me to limit no fault coverage by incorporating within it exclusions related to certain criminal offences.

Suicide and attempted suicide are justifiable exclusions as they reflect intentional conduct. The total exclusion referable to an insured ". . . who is entitled to receive the benefits of any workmen's compensation law or plan" is reasonable.[41] This exclusion is reasonable. It serves to internalize cost to the Workers' Compensation regime. To remove this exclusion would run

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entitled to the death benefit but not the funeral benefit. This makes little sense.

[41] See Standard Automobile Policy, Section B: Special Provisions, Definitions and Exclusions, paragraph 2 (II).

counter to the legislative policy underlying the Workers' Compensation Act.[42]

(c) Section C (Loss or Damage to Insured Automobile)

Section C of the standard form of automobile insurance policy requires little comment. This section of the policy provides indemnity against loss or damage to the insured vehicle and its contents. Section C coverage is not compulsory. It is subdivided as follows:

- (a) all perils;
- (b) collision or upset;
- (c) comprehensive;
- (d) specified perils.

Collision, with a $100 deductible, and comprehensive coverage, with a deductible ranging in the area of $25-$100, are the most common consumer purchases. As between most insurers, collision losses, like vehicle damage claims under Section A of the policy, are adjusted by resort to a fault chart which is part of the intercompany settlement agreement.[43] The concerns that I expressed earlier about this matter have equal force here.

I heard relatively few complaints about the manner in which collision losses were adjusted. There were a number of consumer complaints about the effect collision losses (accidents) had on premiums. Insureds are generally unaware of the manner in which fault is established through resort to the fault chart.[44] In some instances, premium increases resulting from an at-fault accident appear to the insured as an attempt by the insurer to recover the vehicle damage it has just paid (less deductible). This causes public relations problems, to say the least.

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[42] R.S.O. 1980, c. 539.

[43] See Appendix XV.

Most of the consumer-related vehicle damage complaints seem to be the product of a lack of awareness that the coverage generally provided is for the depreciated value of the vehicle, not its replacement value. Although there are appraisal and arbitration provisions which may be resorted to in order to resolve disputes as to quantum,[45] most disputes seem to be resolved informally. Those that are not, proceed to litigation, not arbitration.

Repair costs in Ontario compare favourably with those in other provinces. The cost of labour, shop and paint materials is lower in Ontario than in British Columbia, Saskatchewan and Manitoba.[46] Table 5.2 provides a comparison of the cost breakdown in the three western provinces and Ontario:[47]

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[44] This is part of the insurer's intercompany settlement agreement.

[45] Insurance Act, c. 218, s. 207.

[46] Underwriters' Adjustment Bureau, 1986 Provincial estimates.

[47] Mr. G. Potter, Estimate Comptroller, Manitoba Public Insurance Corporation.

TABLE 5.2

BODY SHOP RATES

	Labour	Shop Material	Paint	Total Hrly. Rate
British Columbia				
per hour	$36.65	+ $ 2.41	+ $12.50	= $51.56
Saskatchewan				
per hour	$33.30	+ $ 3.30	+ $13.35	= $49.95
(sample repair @ 10 hours = $496.50)				
Manitoba				
per hour	$30.45	+ $ 4.00	+ $14.00	= $48.85
Ontario				
per hour	$28.00	+ No Allowance	+ $ 5.00	= $33.00*

*labour cost in Ontario can be as high as $40 although it is often reduced where bidding occurs between larger insurance companies.

As stated in Chapter 7, vehicle damage costs are under control. Nevertheless, all reasonable cost-efficient steps should be taken to establish and control the cost of vehicle repairs. I endorse the use of appraisal centres and would encourage the expansion of those facilities.

Body shop rates are also slightly higher in the Maritimes than in Ontario, partly as a result of the 11% tax imposed on the total estimate for repairs. The rates in Quebec are competitive with those in Ontario. Unlike the Western provinces, Quebec's government automobile insurance corporation allows private insurers to sell coverage for vehicle damage. In Quebec it is mandatory that all vehicles be appraised at approved appraisal shops but the hourly rate is left open and is negotiated by the insurance companies.

Vehicle damage repair costs are positively affected by the competition between "aftermarket parts" and original equipment manufacturer (O.E.M.) parts or "carmaker parts". Aftermarket parts are automobile parts supplied as a replacement for original equipment by a manufacturer other than the carmaker. These manufacturers can be original contract suppliers of O.E.M. parts or other merchandisers. Parts such as tires, batteries, radiator cores, mufflers, spark plugs, oil filters, windshields and others have been accepted as aftermarket parts by consumers for over 50 years. In the early 1970s, aftermarket partial body sheet metal panels became available and in 1983, full body sheet metal panels were introduced. Fenders, hoods, door assemblies, bumpers and grilles are now available as aftermarket parts. The suppliers are manufacturers in Taiwan, Japan, Korea and Brazil, as well as in Canada and the United States.[48]

Automobile insurers spend almost $318 million a year to repair vehicle damage resulting from accidents in Ontario and $6 billion a year in the United States.[49] Insurance companies have encouraged the use of aftermarket parts because of the significant savings involved.

Automobile manufacturers have responded by cutting prices dramatically on auto parts which are also available as aftermarket parts. Where aftermarket parts are available, competition has reduced prices by 25 to 40%, depending on the type of repair involved.[50] This can be illustrated by comparing the prices of the two-part 1977 Camaro grille. The lower part, which can only be replaced with a monopoly (O.E.M.) part, has doubled in price since 1979 ($24.50 to $51.00). The upper part can be replaced either by an O.E.M. part or an aftermarket part. When a competitive part was introduced at a price of $46.00, the O.E.M. price dropped from $90.75 to $51.75.[51] There are numerous similar examples.[52]

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[48] Letter from Mr. F. C. Fraser, Deputy Regional Vice President, State Farm Insurance Companies, dated July 13, 1987.

[49] Green Book, 1986, p. 291; L. R. Beck, "Carmaker Parts: Consumers Will Pay for Government Support," National Underwriter, (May 25, 1987).

Automobile manufacturers have lobbied state insurance officials and the federal government in the United States for regulations which would restrict competition in the auto parts business.[53] They have initiated advertising campaigns to warn consumers about inferior quality in aftermarket parts. They have also publicized the problem of counterfeit and look-alike auto parts, which are said to be substandard parts.

Most aftermarket parts suppliers belong to the Aftermarket Body Parts Association (A.B.P.A.), which has a voluntary certification program. Parts are tested and certified to be of "like kind and quality" as their O.E.M.

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[50] National Association of Independent Insurers (N.A.I.I.), "Competitive Auto Parts vs. Carmakers' Parts," (undated).

[51] N.A.I.I., "Competitive Auto Parts."

[52] One example is a 1986 Mustang front bumper. When unexposed to aftermarket parts competition, the price was $744.20. The O.E.M. when faced with aftermarket parts competition reduced its price to $287.51. The list goes on.

[53] Beck, "Carmakers Parts."

counterparts. Certified parts display distinguishing registered marks and are subject to a written five-year warranty. The A.B.P.A. publishes a directory of certified auto parts.[54]

Body shops may use one or more competitive auto parts suppliers. When a competitive auto part is available, a body shop may choose to include the competitive auto part in the repair estimate. A car owner may accept the body shop recommendation to use competitive parts or may decide instead to use carmaker parts.[55] The consumer is usually not aware of the fact that the replacement part may be an aftermarket part rather than a new O.E.M. part. The estimate shown to the consumer merely reflects the insurer's assessment of the loss.

All insurance companies should be required to establish quality and service guidelines for the use of aftermarket parts. Parts should be of O.E.M. quality and the quality should be guaranteed by both the supplier and the insurer. The use of aftermarket parts where available is to be encouraged in the interest of controlling vehicle damage repair costs. Consumers should be informed of the name of the manufacturer of the auto part being used in the repair; this would promote consumer recognition of quality brands and discourage the use of uncertified parts. There should be severe penalties for the importation or sale of substandard, counterfeit or look-alike auto parts.

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[54] Statement of the Alliance of American Insurers on the National Association of Insurance Commissioners' Aftermarket Parts Model Regulation. (Undated)

[55] N.A.I.I., "Competitive Auto Parts."

(d) Uninsured/Unidentified Motorist Coverage

Since March 1980, the no fault section of the automobile policy has included Ontario's compulsory uninsured motorist coverage.[56] That coverage is in Section B but can best be considered separately. Uninsured coverage was included in the automobile policy with the advent of the Compulsory Automobile Insurance Act[57] to provide compensation for bodily injury or death caused by an unidentified or uninsured automobile.

Damage to the insured vehicle and its contents is included in the uninsured motorist coverage. The coverage is not no fault; the insured must establish fault on the part of the uninsured or unidentified motorist in order to secure compensation.

The total coverage provided is the existing minimum third party liability limits in the jurisdiction where the accident occurs, regardless of the number injured or killed. This becomes significant in United States jurisdictions having low minimum limits. The maximum recovery by an Ontario insured injured in the United States by an uninsured or unidentified motorist will invariably be substantially lower than in Ontario as no American state has minimum limits as high as $200,000.

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[56] Insurance Act, R.S.O. 1980, c. 218, s. 231. This coverage is compulsory; uninsured coverage is not. Underinsured coverage is provided by endorsement (now SEF 44).

[57] R.S.O. 1980, c. 83.

Vehicle and contents damage claims are subject to a $100 deductible and a property damage limit of $25,000. Bodily injury claims have priority up to $190,000 (in Ontario). The priority is expressed in percentage terms (95% bodily injury priority).

The uninsured (or unidentified) motorist is responsible for any sum paid by the insurer under the uninsured motorist coverage. If there is a judgment, the judgment is assigned to the insurer before payment. If the claim is settled, the insurer is subrogated to the rights of the person to whom payment was made.[58] Accident benefit payments do not reduce the uninsured motorist's liability. Although uninsured motorist coverage is part of Section B of the policy, the special provisions, definitions and exclusions of Section B are not applicable to the uninsured motorist coverage. The automobile policy's general provisions, definitions, exclusions and statutory conditions do apply. Uninsured/unidentified motorist coverage does not belong in Section B of the policy. I will deal further with that issue when making recommendations as to policy structure.

(e) Underinsured Motorist Coverage

Underinsured coverage first became available in August 1980. This coverage is not compulsory, but is purchased by approximately 90% of insured drivers. Brokers are reluctant not to provide this coverage; therefore it is sold with the compulsory automobile insurance package (Sections A and B) unless the insured specifically declines to purchase underinsured protection. The underinsured endorsement is now known as SEF 44, the Family Protection Endorsement. The SEF 44 endorsement replaced SEF 42. SEF 44 underinsurance protection applies to policies containing that protection written after February 1, 1985. The SEF 42 endorsement still applies to relevant policies written (and accidents occurring) before February 1, 1985.[59]

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[58] Insurance Act, c. 213, s. 23(5).

Underinsured motorist coverage is designed to provide first party protection when the insured suffers loss or damage because of the negligence of a defendant who has insufficient insurance coverage. The purpose of both the SEF 42 and SEF 44 endorsements is to put the injured person in essentially the same position he would have occupied had the negligent driver's limits been equal to the insured's own Section A third party limits.

The first party insurer's SEF 44 accident exposure does not vary with the number of claimants, injuries, deaths or vehicles involved. SEF 44 represents the difference between the insured's Section A policy limits (or, in rare cases, some other amount that is specified as applying to the SEF 44 endorsement), and the total of all limits of motor vehicle liability insurance of the inadequately insured motorist and any person who may be jointly liable.

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[59] For a detailed discussion of SEF 42 and its implications in multiple claimant accidents, see Borland v. Muttersbach (1985), 49 O.R. (2d) 165. See also J. R. Morse, "S.E.F. No. 44 Underinsured Motorist Coverage," Advocates' Qtly. 7(1986-87):185; P. M. Iacono, Underinsured and Uninsured Motorist Coverage, Paper prepared for Canadian Management of Professional Development (October, 1985); and R. M. Bogorach, Uninsured and Underinsured Coverage, Paper prepared for the Department of Continuing Education, Canadian Bar Association (May 23, 1987).

SEF 44 coverage is different from that provided by SEF 42 in these general respects:

(a) F.L.A. derivative claimants are insured persons under SEF 44; there was some doubt about this under SEF 42;

(b) SEF 44 coverage has been limited to named insured persons, their spouses and dependent family members in the same dwelling premises subject to the exception that infirm children over the age of 18 and dependent upon the named insured or children attending school, college or university are specifically included within the meaning of named insured;

(c) there is clearly no underinsured coverage under SEF 44 for damage caused by an unidentified motorist;[60]

(d) the SEF 44 coverage is excess to amounts recovered pursuant to policies providing disability benefits, loss of income benefits, medical benefits or rehabilitation benefits.

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[60] Compare SEF 42. See Wigle v. Allstate (1985), 49 O.R.(2d) 101 (C.A.).

This eliminates overcompensation permitted at common law;[61]

(e) under SEF 44 prejudgment interest is only payable after the first party insurer has received notice as required by the endorsement;

(f) the underinsurer has a right to contest the main action under SEF 44;

(g) although it remains to be seen how the courts will interpret the limit of the coverage extended by SEF 44, it would appear that the underinsured coverage is limited to the difference between the Section A limits of the not at-fault motorist and the Section A limits of the underinsured motorist;

(h) passengers in vehicles with SEF 44 coverage do not benefit from the coverage. Passengers are covered for underinsurance if they have an SEF 44 policy under which they are a named insured or a dependent relative of the named insured.

C. GENERAL RECOMMENDATIONS AS TO THE STANDARD FORM OF AUTOMOBILE INSURANCE POLICY

I have now discussed the various coverages and delivery problems under the standard automobile insurance policy. I began this chapter by saying that the policy taken as a whole was badly structured and incomprehensible. The following are some general recommendations:

1. A committee should be established to redraft the standard automobile insurance policy once

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[61] Boarelli v. Flannigan, [1973] 3 O.R. 69.

decisions have been made as to policy structure. Drafting should not be left solely to lawyers (or judges) or committees of the insurance industry. Those responsible for redrafting the policy should start from the premise that it is not an act of generosity, but of necessity that lay persons be able to understand the policy. We can usefully look to American experience. In Montana, a drafting committee established by the State included a lay person (a journalist) who was given a veto power on matters of form. Arizona, Florida and Pennsylvania have included communications experts for drafting purposes.[62] Legal advice will, no doubt, be required.

2. The policy structure should be reconsidered. I think most people are confused by the casual use of words such as part, section and subsection. The dominant divisions in the policy are the sections, next come the subsections and then the parts. That seems to me to be doing it backwards; it should be the other way around.

3. The general definitions and provisions should be those which apply to the entire policy, without exception. Definitions and provisions which apply to particular parts of the policy should be in the relevant part of the policy.

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[62] The Committees to which I refer were responsible for redrafting jury instructions, not insurance policies. Assuming both jury instructions and insurance policies should be understandable, the American experience is worth looking at.

4. Exclusions relevant to each part of the policy should be contained in that part so that there is a clear understanding as to what coverage is excluded.

5. The uninsured/unidentified motorist coverage should be taken out of Section B and put in a separate part of the policy. The Quebec accident provisions should not be included in Section B.

6. The policy should be structured as follows:

Part 1: Third Party Liability

Part 2: No fault Benefits:

- (i) medical and rehabilitation benefits
- (ii) disability benefits
- (iii) death and funeral benefits
- (iv) other benefits

Part 3: Vehicle Damage:

- (i) collision
- (ii) comprehensive
- (iii) specified perils
- (iv) all perils

Part 4: Uninsured/Unidentified Motorist Coverage

Part 5: Supplementary Benefits respecting Accidents Occurring in Quebec

Part 6: Statutory Conditions, Policy Provisions and Definitions

- (i) Statutory Conditions
- (ii) General Provisions and Definitions

Part 7: Endorsement Coverage including SEF 44.

CHAPTER 6

INSURANCE PRINCIPLES, THE CLASSIFICATION SYSTEM AND UNDERWRITING

A. INTRODUCTION

If I have learned nothing else during the course of this Inquiry, it is that insurance is a complex business into which non-experts should tread with extreme caution. In this chapter, I propose to consider basic insurance principles, as related to automobile insurance; how premiums are established through the classification system; the underwriting process; and special cases of difficulty (taxis, young drivers, motorcycles, off-road vehicles and trucks).

I should make it clear that I do not consider it either within my competence or terms of reference to design an automobile insurance classification system, or a system of regulating automobile insurance in Ontario. I do intend to proffer recommendations as to the criteria against which a classification system should be evaluated and the need, or otherwise, for regulation of automobile insurance premiums generally. Rate regulation will be considered in Chapter 16.

At least from the standpoint of automobile insurance, the public's concern is about premiums. The public debate in this area consistently raises the issues of fairness and affordability. A number of questions are repeatedly asked. Why should A and B, both with no motor vehicle accident experience, be required to pay different automobile insurance premiums? Why should the driver in

Vancouver pay less for automobile insurance than his twin brother in Toronto? Why should the driver in Kenora pay more for automobile insurance than a similar driver in Dauphin, Manitoba? Why should drivers in Toronto pay more for automobile insurance than drivers in Kenora, or Ottawa for that matter? Then, there are ethical questions of whether it is right that young drivers pay higher premiums than older drivers; that women pay lower premiums than men; that the unmarried pay higher premiums than the married. These are questions and issues which deserve to be dealt with. An understanding of the general principles of insurance is required, if not by all, at least by those who claim to represent those affected by allegedly high and unfairly allocated insurance premiums.

B. GENERAL INSURANCE PRINCIPLES AND RISK CLASSIFICATION

Insurance is a mechanism by which an individual exchanges the risk of an uncertain and potentially large loss for a certain, but smaller loss.[1] Another way of putting it, in the automobile context, is that automobile insurance is a means for providing for the uncertainty associated with automobile accidents. The uncertainty of the event (a motor vehicle accident), the timing of the event and its severity are uncertainties (risks) assumed by the insurer for a predetermined price (premium).[2]

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[1] N. Shayer, Driver Classification and Automobile Insurance," in Automobile Insurance Risk Classifications: Equity and Accuracy/Massachusetts Dept. of Insurance, 1978.

[2] A somewhat similar definition of insurance can be found in Risk Classification - A Statement of Principles by the Canadian Institute of Actuaries.

The insurance contract is concluded by the payment of a premium and its acceptance by the insurer. In general terms, premiums paid by the many go to pay the motor vehicle accident losses of the few. Through insurance, losses are distributed. Although there are a large number of motor vehicle accidents, particularly accidents involving property damage, there are, nevertheless, relatively few such occurrences in relation to the number of people who pay automobile insurance premiums.

Premiums paid by an insured should reasonably reflect the degree of risk the insured imposes on the system. This raises the question of how a given risk is to be assessed. One way is to rely on intuition and, one might hope, good judgment. Another obvious method is to take into account the risk's actual loss experience and driving record over an extended period. Both methods are unreliable and unworkable. Undertaking a risk by intuition is obviously suspect. Too many variable judgment calls from too many people are required. Quality control is deficient. Considering a given risk's actual loss experience and driving record on its own is unworkable. There may be no data available (for example in the case of a newly licensed driver). Data that are available will often be short-term. Data provided may be inaccurate and need costly verification. Moreover, information obtained by taking account of the past may have no relevance to present or to future expected risk exposure.

Because individual risk assessment is manifestly unworkable, risks have to be grouped for premium rating purposes. The Canadian Institute of Actuaries put the principle this way:

> That the grouping of risks with similar risk characteristics for the purposes of setting prices is a fundamental precept of any workable private voluntary insurance system.[3]

The grouping of insureds with similar risk characteristics is done systematically, not randomly. The structure established is referred to as the classification system. This system represents the grouping structure within the automobile insurance system. The purpose of the exercise is not to identify unusually good or bad risks, or to reward or penalize certain groups at the expense of others. The purpose is to group individual risks with similar loss expectations. Insureds are allocated to predetermined cells. An individual within a group or cell represents no more predictable a risk than that individual was before allocation to the cell. By allocating insureds to groups with similar risk characteristics, a reasonable price can be established by observing the groups' losses and relating the price to the average experience of the class. In a competitive environment there is an incentive to refine classifications to more accurately reflect expected loss costs among identifiable classes of risk. Because classification is fundamental to insurance, the question is not about whether to draw lines so as to establish cells or groups, but rather where those lines will be drawn.

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[3] Canadian Institute of Actuaries, Risk Classification - A Statement of Principles.

The creation and continuation of any classification system is dependent upon statistical data. Statistical data were first gathered in a formal way by the Canadian Automobile Underwriters Association in 1926. A statistical plan was devised by the Canadian Automobile Underwriters' actuary at that time. In 1929, an Ontario Royal Commission on Automobile Premium Rates was established. In 1930, the Commissioner, Mr. Justice Hodgins, recommended in his Report:

> That the loss costs of insurance in Ontario in the future should be established by the combination of the experience of all companies, and that such experience should be developed on the statistical plan prescribed pursuant to Section 69(A) of the present Insurance Act.

The Hodgins Report led, at least indirectly, to statutorily required statistical reporting by the insurance industry. Since January 1968, the I.B.C. has been the government's statistical agent. In provinces other than Quebec, British Columbia, Saskatchewan and Manitoba, rates are established from the collective loss experience compiled within the framework of a government approved statistical plan. The statistical plan has been revised from time to time since it came into force in 1930. Changes are subject to approval by the relevant provincial Superintendents of Insurance.

Insurers compile and collate statistics by class. Insurers are not required to use specific methods of recording statistics. Statistical data submitted by automobile insurers are collected by the Statistics

Division of the I.B.C. The collated statistics are assembled in what is commonly called the "Green Book" which contains data required to be collected by the statistical plan and other information thought to be important to insurers. The Insurers' Advisory Organization (I.A.O.) also collects data, which includes the results of I.A.O. members' and some individual companies' loss experience. Although all companies must report required information further to the statistical plan, not all companies have access to I.A.O. recommended premium rates, nor do all insurers establish rates on the basis of the I.B.C.'s Green Book data. Larger companies do not have to resort to that data. Smaller companies do not have a sufficiently large data base and are compelled to seek access to Green Book data, and perhaps I.A.O. data and recommended rates.

There is no doubt that adherence to the statistical plan tends to perpetuate business practice. The submission of one insurer to this Inquiry referred to the statistical plan as encouraging "lemming-like behaviour" within the automobile insurance industry. This concern gives rise to the "cart-horse" question of whether business practice determines what statistics are gathered or whether statistics obtained determine business practice. A Board of Inquiry appointed under the Ontario Human Rights Code hearing a case in which age classification was challenged, put it this way:

> To what extent are we using statistics to justify business practice or to what extent are business practices flowing from statistical analysis?[4]

Ontario's classification system has become increasingly complex. In the 1940s there were two classes: business and pleasure. In 1950-51, age was introduced as a rating factor and four classes were established. The four classes were:

(a) pleasure - no driver under 25;

(b) pleasure - principal driver under 25 - business or pleasure;

(c) all other pleasure use (including occasional use by a driver under 25); and

(d) all other business use.

In 1957, the classification system was expanded to five classes. For the first time a distinction as to sex was made part of the classification system. In 1961, the classification system expanded to include seven classes. Mileage was introduced at this time. A distinction was made between those driving under 10,000 miles a year and those driving over 10,000 miles a year for pleasure or business. In 1964, marital status became a rating variable for male drivers under 25. This resulted in the number of cells within the classification system increasing to nine. By 1968, the number of classifications had increased to 14 as a result of establishing sub-groups of male and female drivers under 25.

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[4] Bates v. Zurich Insurance Company, Frederick Zemans, Chairman [1985] I.L.R.I.-1942.

There is also a territorial aspect to risk classification. The province is divided into 12 regions for purposes of the classification system. The I.B.C. collects data in 19 statistical areas. Loss experience has confirmed that loss costs are higher in Toronto than in Kenora. Traffic density is the main factor. There is a direct relationship between traffic density and accident frequency. In simplistic terms, that is why insurance is cheaper in Kenora than in Toronto and why, for example, drivers in Victoria pay lower premiums than drivers in Vancouver.[5]

Recent challenges to the classification system have not been related to the concept of classification, but rather its application. The specific focus of attack has been on the legitimacy of establishing cells based upon an insured's age, sex or marital status. There have been other criticisms of the classification system; however, the issues of age, sex and marital status seem to dominate.

There are those who believe that certain risks, such as newly licensed drivers, are good risks until those drivers prove otherwise. Those espousing that view almost always mean well. The "good-until-proven-otherwise" approach to premium rating seeks validation in the principle of fairness. That altruistic approach to premium rating is fundamentally flawed. Rating judgments have to be made before, not after the event. Accident-free drivers in any workable insurance system will always pay something for the sins of the negligent drivers within the system. That is what insurance is all about.

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[5] British Columbia also uses territorial rating, although it resorts to relatively fewer rating territories.

Professors Rea and Trebilcock in their paper Rate Determination in the Automobile Insurance Industry in Ontario, 1982, put it this way:

> The notion that "clean risks" pay for bad risks when drivers are included in high-risk categories but turn out subsequently to be accident free, really involves the misconception that fairness should be judged not when the risk is presented to the insured, but ex post facto, when some drivers are known to be loss free. Following this line of reasoning, someone who bought term life insurance, but did not die during the period of coverage might argue that, ex post facto, got nothing for his money. The classification system should be judged ex ante when risks are being assessed, not ex post.[6]

The basic principle that expected future, not past, loss costs must be assessed is often forgotten or ignored. In setting premiums the objective is to fairly and objectively identify and group similarly situated risks, to determine average expected loss costs and then to apply those average costs to all members of the group. This does not mean that past losses and those who caused them are not to be taken into account in determining premiums. Past at-fault accident involvement will typically result in a premium increase because it is thought to be predictive of future at-fault involvement, not because the insurer is attempting to get his money back. In a competitive industry such as exists in Ontario no individual insurer can seek to recoup its past losses; it must price its policies to reflect expected future losses.

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[6] Rea and Trebilcock, Rate Determination, p. 46.

Once groups or cells are established by a classification system, even if the system is sound in principle, there may still be arguments advanced that a certain group's premiums are excessively burdensome. Any response to this argument must be a social policy response. If a particular group's reduction in premiums is not statistically justified, other drivers will pay the price. This is cross-subsidization. Those who seek statistically unjustified premium reductions for a particular group are often motivated by a sense of fairness. This may legitimately be viewed as unfair by motorists called upon to subsidize those drivers whose premiums have been set below a statistically justified level.

Cross-subsidization of a particular group or cell by others within the system runs counter to the competitive dynamics of the private sector delivery of insurance.[7] When any subsidization exists or is perceived to exist, certain risks will be, or will be seen to be, over and underpriced. Competing insurers will avoid writing underpriced risks and attempt to secure business that is overpriced. Risks that are avoided will eventually add to the population of the Facility Association.

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[7] The issue of cross-subsidization is also discussed in Chapter 15.

C. CLASSIFICATION SYSTEM EVALUATION

Any classification system must be measured against a number of efficiency and equity criteria. The following are among those criteria which I regard as being significant:

(a) Homogeneity

This refers to the need for the expected loss costs of members of a cell, established through the classification structure, to be reasonably similar. It is the expected losses by which homogeneity is measured. Professors Rea and Trebilcock put it this way:

> The expected loss of each individual group member should ideally fall as close as possible to the mean expected loss of the class as a whole.[8]

Not all risks in a class will have the same claims experience. No one can reliably predict individual claims experience. Similarly, the fact that the claims experience of an insured in one cell is the same as the claims experience of an insured in another cell is to be expected and does not mean the classification system is badly constructed, or that a given insured has been placed in the wrong cell within the system.

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[8] Rea and Trebilcock, Rate Determination.

(b) Separation

Just as individual members of a class should have similar expected losses, the class as a whole should demonstrate a difference in expected losses when compared with any other class. Overlapping, in other words, is to be avoided.

(c) Reliability

The classification system must be structured so that individual expected losses can be predicted. To attain this goal individual cells must be easy to administer and relatively immune to fraud and administrative error. This criterion requires that the rating factors be susceptible to accurate and cost-efficient verification.

(d) Acceptability

While not determinative, rating variables and the resulting cells within a classification system must be socially acceptable. This criterion is often referred to as admissibility. For example, premium rating based on race or religion is clearly unacceptable, even if one could successfully argue there is some statistical validity to their use. This criterion is at the root of the attack on age, sex and marital status as rating variables.

(e) Incentive value

A soundly structured classification system will make efficient use of incentives that will encourage policyholders to take precautions. This will reduce losses. Rating variables within a classification system about which the policyholder can do nothing (e.g., sex) do not accomplish that goal.

The five criteria referred to above reasonably dominate the evaluation of any classification system. I note that there are other evaluation criteria which are used.[9]

The classification codes in the current classification system break down this way:

THE PRESENT PRIVATE PASSENGER AUTOMOBILE CLASSIFICATION

(First two positions of class, driving record code)

PLEASURE - NO DRIVERS UNDER 25 except as noted

Class 01: No driving to work; annual mileage of 10,000 or less; two or less operators per automobile who have held valid operators' licences for at least the past three years. Married female occasional operators under 25 may drive and unmarried female occasional operators under 25 with driver training may drive.

Class 02: Driving to work ten miles or less one way permitted; two or less operators per automobile. Married female occasional operators under 25 may drive and unmarried female occasional operators under 25 with driver training may drive.

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[9] See Canadian Institute of Actuaries, *Risk Classification*; Rea and Trebilcock, *Rate Determination*. Others include credibility, predictive stability, expense, constancy, causality and controllability.

Class 03: Drive to work over ten miles permitted; female occasional operators under 25 may drive.

PLEASURE OR BUSINESS

Class 06: Occasional male operator use--male under 25. (Note--the principal operator insures the automobile for use by all other drivers under Classes 01, 02, 03 or 07.)

Class 07: Business primarily; no male operators under age 25.

PRINCIPAL OPERATORS UNDER 25 YEARS OF AGE

MARRIED MALE: (residing with spouse)

Class 08: Ages 20 and under
Class 09: Ages 21, 22, 23 or 24

OTHER MALES

Class 10: Ages 18 and under
Class 11: Ages 19 and 20
Class 12: Ages 21 and 22
Class 13: Ages 23 and 24

FEMALES

Class 18: Ages 20 and under
Class 19: Ages 21, 22, 23 or 24

015 driver - Class 1 Driving record 5
023 driver - Class 2 Driving Record 3
103 driver - Class 10 Driving Record 3
183 driver - Class 18 Driving Record 3

DRIVING RECORD

5 - rated as five-year clear record
3 - three years' experience without claims
2 - two years' experience without claims
1 - one year's experience without claims
0 - less than one year's experience without claims

D. THE PROPOSED CLASSIFICATION SYSTEM

For a considerable time, the classification system has been under attack. The attack is two-pronged. First, the legitimacy of age, sex and marital status as rating criteria has been challenged; second, the classification system as a whole has been alleged to be too complex.

In light of these concerns, in the spring of 1987, a committee under the auspices of the Ministry of Financial Institutions was struck to establish a new classification system. It is important to note at the outset that the elimination of age, sex and marital status was not something which the committee decided to do on its own. The committee was instructed to proceed to design a new classification system in which age, sex and marital status would not be rating criteria. The legitimacy of age, sex and marital status as rating criteria was not debated. The no age, sex or marital status edict seems to have been ethically based, in the sense that social policy, not actuarial data, determined the issue.

The design of an appropriate classification system is a matter for experts and I do not consider it appropriate to embark upon that undertaking. I will, nonetheless, make some general comments about the principle of risk classification and the proposed classification system.

As has been stated earlier in this chapter, the classification of risks based on expected loss costs is essential to any workable private sector insurance system. If risks are not classified before the event insured against, inevitably those who might reasonably claim to be good risks will pay higher premiums and those who might reasonably be accused of being bad risks will pay lower premiums.

The classification system developed by the committee established by the Minister of Financial Institutions has proceeded to the second draft stage. The proposed classification system is set out in Appendix XVI. However one might criticize the result, it is apparent that the government and the insurance industry have recognized the need for a classification system. The residual question is not whether we should have a classification system, but whether the one proposed is soundly structured.

Central to the debate about the structure of the proposed classification system is the use (or elimination) of age, sex and marital status as rating variables. The Ontario debate about age, sex and marital status as rating variables has been lengthy, but not profound. In dealing with age, sex and marital status I think it is necessary to consider why those rating variables were used in the first place.

Young drivers are involved in proportionately more accidents, and more severe accidents than other drivers. The data are overwhelming on this issue. The young driver dividing line at age 25 is arbitrary, but supportable. The same comment could be made if the dividing age were 30. Traffic safety experts have generally concluded that young drivers suffer from a lack of general and driving experience and an under-developed sense of risk perception;[10] young drivers are also said to drive at high risk times.

Sex is used as a rating variable for drivers under 25 because of data which establishes that females are involved in fewer and less severe accidents than males. Being female, or for that matter male, does not in itself cause accidents. There is, however, a statistical correlation which has resulted in sex being a rating criterion. The dominant justification for the use of sex as a rating variable is that it is a reliable proxy for kilometres driven which can be verified at virtually no cost. While verification of sex is both reliable and virtually costless, verification of kilometres driven is relatively unreliable and expensive. In addition to the factor of kilometres driven, if men drive more than women at higher risk times, and as some suggest, with more passengers than women, the expected loss costs of men will be greater than the expected loss costs of women.

Marital status requires little comment. Few tears, actuarial or otherwise, will be shed over its demise as a rating factor. Marital status is another exposure proxy. The underlying assumption is that an insured who is married will drive less than one who is unmarried. The predictive force of marital status is suspect. More importantly, it has become a socially unacceptable rating factor. I endorse the relegation of marital status to history.

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[10] See discussion later in this chapter.

The statistical evidence supporting the use of age as a rating variable is overwhelming. The evidence supporting the use of sex as a rating variable, if not overwhelming, at least supports the conclusion that there is a demonstrable correlation between sex and expected loss costs. This is not a local phenomenon. It applies everywhere cars are driven.

Figure 6.1 illustrates Ontario statistics on the percentage of drivers in each age category who were involved in accidents in 1986. The effect of age on accident rate is obvious. The data for each sex indicate a higher accident rate between ages 16 and 24 than in any age grouping above 24. There is also a marked difference between male and female accident experience. Females have fewer accidents than males at every age level.

Two tables drawing on extensive American data will illustrate why age and sex are used in any classification system.[11] Table 6.1, below, sets out 13 variables which are related to males and females from a base year of age 20 to ages 40 and 65. By way of explanation, the first entry shows 3.73 times as many 20-year-old males are killed in motor vehicle accidents as 40-year-old males. Twenty-year-old males are 55 times as likely to die in a motor vehicle accident as 65-year-old males. Twenty-year-old females are 43 times as likely to die in a motor vehicle accident as 65-year-old females.

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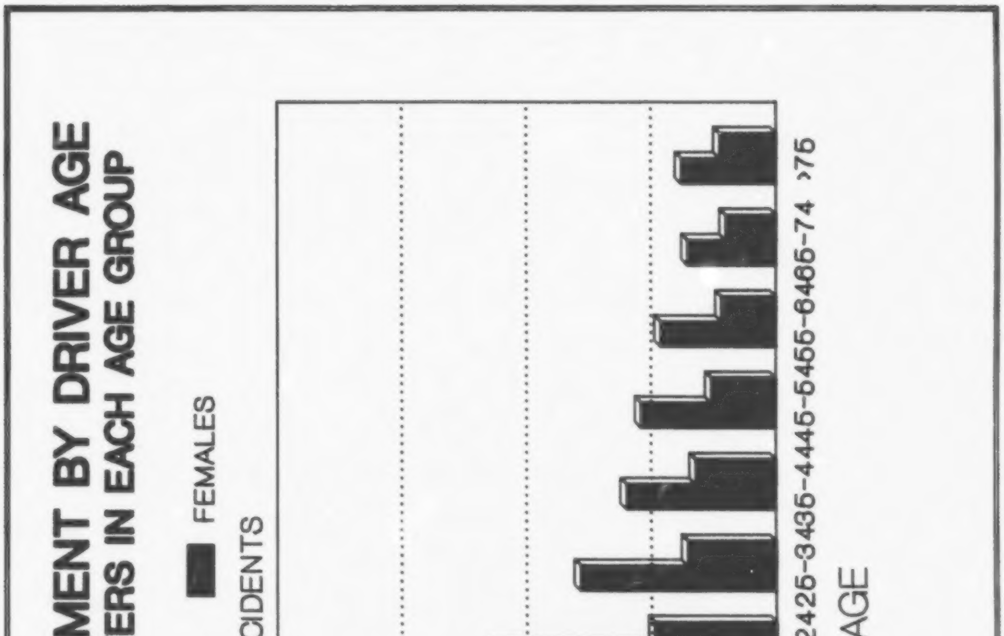
[11] Leonard Evans, "Fatal and Severe Crash Involvement v. Driver Age and Sex," prepared for presentation at the Annual Meeting of the American Association for Automotive Medicine, September 1987.

Figure 6.1



SOURCE: ONTARIO ROAD SAFETY
ANNUAL REPORT:1986

TABLE 6.1

VARIABLE	MALES Age 20 Age 40	MALES Age 20 Age 65	FEMALES Age 20 Age 40	FEMALES Age 20 Age 65
Number of drivers killed (in any type of motor vehicle)	3.73	8.11	2.53	4.48
Number of drivers killed per capita (in any type of motor vehicle)	2.46	3.44	1.75	2.27
Number of drivers killed per licensed driver	2.43	3.22	2.04	1.94
Number of drivers killed per unit distance of travel	4.87	3.64	3.23	1.83
Estimated driver involvements in severe crashes per licensed driver	3.79	8.99	2.90	4.29
Estimated driver involvements in severe crashes per unit distance travelled	7.58	10.32	4.61	4.07
Drivers involved in single vehicle crashes in which pedestrians are killed	2.77	8.45	2.96	10.47
Drivers per capita involved in single vehicle crashes in which pedestrians are killed	1.83	3.58	2.04	5.45
Drivers per licensed driver involved in single vehicle crashes in which pedestrians are killed	1.84	3.50	2.08	4.08

Drivers per unit district involved in single vehicle crashes in which pedestrians are killed	3.28	3.56	3.47	3.97
Probability that a given death is a motor vehicle fatality	4.86	55.14	5.59	43.13
Longevity increase per capita if all motor vehicle fatalities eliminated	3.25	12.44	2.28	6.55
Total longevity increase if all motor vehicle fatalities to specific age eliminated	6.05	27.60	4.17	10.23

Table 6.2 below sets out a male/female comparison for age 20, 40 and 65. As can be seen, males have higher rates for all but one case. The exception is at age 65, when the probability that a given death is due to a motor vehicle accident is higher for females than males (0.92). Professor Evans logically views this as no surprise in that "mortality due to all causes except motor vehicle crashes is almost twice as great for 65-year-old males as for 65-year-old females."[12]

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[12] Evans, "Fatal and Severe Crash Involvement."

TABLE 6.2

VARIABLE	MALE TO FEMALE RATIO		
	Age=20	Age=40	Age=65
Number of drivers killed (in any type of motor vehicle)	4.88	3.31	2.70
Number of drivers killed per capita (in any type of motor vehicle)	4.84	3.44	3.20
Number of drivers killed per licensed driver	4.16	3.49	2.51
Number of drivers killed per unit distance of travel	2.09	1.38	1.05
Estimated driver involvements in severe crashes per licensed driver	5.41	4.14	2.59
Estimated driver involvements in severe crashes per unit distance travelled	2.71	1.65	1.07
Drivers involved in single vehicle crashes in which pedestrians are killed	3.21	3.43	.07
Drivers per capita involved in single vehicle crashes in which pedestrians are killed	3.18	3.56	4.84
Drivers per licensed driver involved in single vehicle crashes in which pedestrians are killed	2.90	3.27	3.38
Drivers per unit distance involved in single vehicle crashes in which pedestrians are killed	1.23	1.30	1.37

Probability that a given death is a motor vehicle fatality	1.18	1.36	0.92
Longevity increase per capita if all motor vehicle fatalities eliminated	2.41	1.69	1.27
Total longevity increase if all motor vehicle fatalities to specific age eliminated	3.07	2.11	1.14

Table 6.2 clearly demonstrates the increased risk presented by male drivers compared to female drivers. For example, using the first variable - number of drivers killed in any type of motor vehicle accident - Evans' data show that 4.88 times as many 20-year-old males are killed in motor vehicle accident as 20-year-old females; 3.31 times as many 40-year-old males are killed in motor vehicle accidents as compared to 40-year-old females; and 2.70 times as many 65-year-old males are killed in motor vehicle accidents as compared to 65-year-old females.

Young drivers are more of a risk to the system than older drivers. Male drivers are more of a risk than female drivers. Thus, if age and sex are eliminated, it seems to me that the threshold question is what, if anything, will replace those rating variables. The critical question then becomes how effective those replacement variables will be, having in mind the relevant evaluation criteria and sound insurance principles.

The proposed classification system eliminates age and substitutes years licensed as a rating variable. At page 14 of the draft classification system, the following appears:

YEARS LICENSED

Years licensed is a new concept applied to both primary and secondary drivers, as follows:

Principal driver	Secondary driver (the least experienced driver in household in residence)
<3 years	<3 years
<3 with driver training	<3 years
3 - 6 years	3 - 6 years
7 - 14 years	7 + years
15 - 34 years	
35 + years	

In the proposed classification system the substitute variable for sex is kilometres driven. At page 13 of the proposed classification system the following appears:

USE OF VEHICLE

Four categories of use with four distance bands will be employed, as follows:

Use	Low	Medium	High	Very high
Pleasure	<7,500 km	7,500 - 20,499	20,500 - 35,499	35,500 +
Short commute (regular 1-way drive <10km)	7,500 km	7,500 - 20,499	20,500 - 35,499	35,500 +
Long commute and business (>10 km)	<7,500 km	7,500 - 20,499	20,500 - 35,499	35,500 +
Farm	<7,500 km	7,500 - 20,499	20,500 - 35,499	35,500 +

Although the proposed classification system recognizes that age and sex cannot be abandoned without the introduction of substitute rating factors, substituting years licensed for age and kilometres driven for sex may be a somewhat cosmetic exercise. First, most brokers and agents who exercise a front-line underwriting function will know the approximate age of an applicant for automobile insurance. Sex is even more obvious. The underwriting function involves the assessment of a particular risk on its own merits. At that level neither age nor sex is likely to be ignored. There is an inevitable relationship between a classification system, underwriting, marketing and administration. Any consuming faith that abandoned rating variables, if otherwise reliable, will be eliminated by the introduction of a new classification, is, I think, somewhat naive. This is particularly true if substitutes are not perceived as being reliable. For example, at the administrative or underwriting level, insurers may conclude that premiums paid by young males will not meet expected losses and premiums paid by young females will be more than adequate to meet expected losses. This recognition will result in insurance being less available to males. It is probable in the circumstances set out above that the number of young male drivers in the Facility Association will increase.

If the purpose of the exercise is to eliminate age as a rating variable, we might consider whether, in substance as opposed to form, that has been accomplished by the introduction of years licensed. Take, for example, the proposed classification system's first "years licensed" group (0-3 years). What drivers will be in this group? The vast majority of the sub-group with zero to three years driving experience will consist of drivers under 20. That is not surprising and in a sense validates the use of years licensed as a substitute for age. It also raises the question of the purpose of the exercise. If the substitute is to consist almost entirely of drivers of a certain age it seems unrealistic to obscure the issue by ignoring age as a rating variable.

The data suggest that young inexperienced drivers present a greater risk than older inexperienced drivers. If this is true, then substituting years licensed for age is an imperfect solution and it will probably result in cross-subsidization. Why this is so has been recently dealt with by Professors Matthews and Moran at the University of Guelph.[13] They noted:

> Although young drivers' estimates of accident involvement in the next year were higher than those of older drivers, young drivers gave lower ratings of accident risk for specific driving situations which demanded fast driving reflexes or substantial vehicle-handling skills. Young drivers rated their own risk of an accident and driving abilities as being the same as for older drivers. However, they saw their peers as being significantly higher at risk and having poorer abilities than themselves. Young drivers were more confident in their driving abilities than the older drivers. Evidence is provided to suggest that perceived risk and self-perceived driving abilities are interrelated.

In summary, in my opinion the policy decision to eliminate age as a rating variable is suspect for these reasons:

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[13] M.L. Matthews and A.R. Moran, "Age Differences in Male Drivers' Perception of Accident Risks: The Role of Perceived Driving Ability," Acc. Anal. and Prev. 18, no. 4 (1986): 299.

(1) given the probable age of members of any classification cell defined by years licensed, substituting years licensed for age will not in substance eliminate age as a rating criterion.

(2) years licensed is an imperfect substitute for age, in that it does not take into account data which consistently demonstrate that young newly-licensed drivers present a greater risk than older newly-licensed drivers.

(3) in any event, underwriters will be aware of the age of principal and occasional drivers even if specific information in that regard is not required on an application for insurance.

In expressing this opinion I recognize there may well be a constitutional bar to age-based premium rating.[14]

Unlike age, sex in its own right is not predictive. Sex is resorted to for premium rating purposes only as a proxy. It is a substitute for exposure variables such as kilometres driven, the propensity of women to drive at less high risk times than men and the propensity of women to drive less frequently while impaired. In the proposed classification system, sex has been replaced by kilometres driven as a rating factor. Even if this substitute is reliable it will expose the system to increased verification costs which will be passed on to the consumer in the form of increased premiums. There is also the question of the reliability of kilometres driven as a rating factor. In this regard it should be noted that the crucial issue is not the number of kilometres the applicant for insurance has driven over the past year, but rather the number of kilometres that will be driven in the period for which coverage is provided. The proposed system assumes that consumers will be both candid and accurate in their predictions. Human nature being what it is, neither assumption may be warranted. A complicating matter is that the insured must estimate the kilometres that will be driven by any occasional drivers. While the validity of continuing to use sex as a rating variable is questionable because of a legitimate concern over its constitutionality,[15] one should not be oblivious to the difficulties created by replacing it with kilometres driven.

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[14] See Chapter 14 and Appendix XII.

Some have suggested that increased premiums for young females and young married couples is an inevitable result of abandoning sex as a rating variable. That is what happened in Montana where legislation eliminating sex and marital status (not age) became effective on October 1, 1985. Table 6.3 sets out the effects of unisex rating on premiums in Billings, Montana in 1985.[16] Those who won and lost, from a premium standpoint, can clearly be seen from Table 6.3.

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[15] See Chapter 14 and Appendix XII.

[16] This Table has been reproduced from "Unisex Insurance Rating - Montana's Failed Experiment," J. of Am. Insurance 3rd Quarter (1987).

TABLE 6.3

EFFECTS OF UNISEX RATING ON AUTO INSURANCE PREMIUMS IN BILLINGS, MONTANA, 1985

Rating Class	Average premium 9/30/85 (before unisex rating) $	Average premium 10/2/85 (after unisex rating $	Average change in premium $	Average percent change in premium %
17-year-old single (occasional driver)	880.59	781.23	-199.36	-11.3
17-year-old female (occasional driver)	634.68	781.23	+146.57	+23.1
19-year-old male (principal driver)	1,181.56	934.64	-246.92	-20.9
19-year-old female (principal driver)	686.40	934.64	+248.23	+36.2
23-year-old male (principal driver)	855.35	644.41	210.94	-24.7
23-year-old female (principal driver)	537.83	644.41	+106.58	+19.8
23-year-old male (principal driver)	508.09	647.33	-139.24	+27.4
23-year-old female (principal driver)	401.94	637.65	+235.72	+58.6
35-year-old single male	401.60	413.13	12.36	+3.1
35-year-old single female	386.98	413.13	26.15	+6.8
35-year-old married couple	401.94	416.04	14.11	+3.5

Note: Data was collected from 12 insurers accounting for approximately 72% of auto insurance premiums written in Montana in 1985.

The Montana results show that a 40-year-old couple with a 16-year-old daughter had an average increase of 33% in their automobile insurance premiums. If the same couple had a 16-year-old son, instead of a 16-year-old daughter, their rates would have declined 8%. The Montana study concluded quoting, and adopting, a Montana Department of Insurance conclusion, that those most affected by the unisex law, "were young women, young married couples and married couples with young female drivers."

The Montana rate increases were not benignly accepted as legitimate by Robert Hunter of the National Insurance Consumers Organization. Mr. Hunter suggested, "the insurers have engaged in political ratemaking in your small state to send a signal to the rest of the nation, 'back off neutral pricing'." Mr. Hunter supported his claim by pointing to the fact that average automobile insurance premiums in Montana rose 47% in 1985. Montana insurers rejected this argument, pointing out that the Montana unisex premium rating law did not take effect until October 1, 1985, and that Hunter himself had conceded insurers had sound economic reasons for rate increases in 1985.

American experience would suggest that abolishing sex as a rating variable will inevitably result in increased premiums for young women.[17] Young men still seem to get involved in more accidents and more severe accidents than young women, given the same distance driven. To that extent eliminating sex will result in women bearing an increased premium burden. What that burden will be should be made clear before the proposed classification system is implemented.[18]

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[17] See "Unisex Insurance Rating - Montana's Failed Experiment."

Two further points remain. First, the premium increases to which young women are exposed will be substantial, because the population of young male drivers is much larger than the population of young female drivers. Second, even if kilometres driven turns out to be a reliable substitute, underwriters may not accept it as such. If this happens, underwriters will write the perceived overpriced female risks and reject the perceived underpriced male risks.

The proposed classification system should be discussed and evaluated outside the perimeters of the committee established to create it. Most importantly, the impact of the system on the premiums consumers will be required to pay should be disclosed and discussed. I strongly endorse the committee's recognition that the proposed classification system "is not at this time a final proposal, but rather a starting point for discussion of this complex matter".[19]

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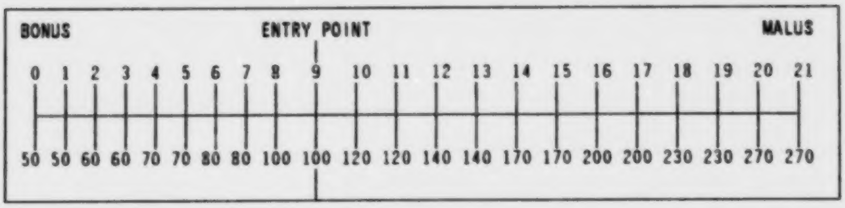
[18] Stephen R. Ryan, "The Elimination of Gender Discrimination in Insurance Pricing: Does Automobile Insurance Rate Without Sex?" Notre Dame L. Rev. 61 (1986): 748.

[19] See Proposed Classification System, Draft No. 2 (Appendix XVI, p.1).

E. BONUS/MALUS

No discussion of the principles underlying classification systems would be complete without some reference to bonus/malus. A bonus/malus system of classifying insureds was recommended by the Ontario Task Force on Insurance which looked to the Swiss bonus/malus model and the classification system used by the Insurance Corporation of British Columbia (I.C.B.C.).[20] The I.C.B.C. classification system incorporates the bonus/malus concept in its rate-making structure.

The bonus/malus rating most often referred to is the system used in Switzerland. The Swiss bonus/malus scale is reproduced below. Some explanation is required:



0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
50	50	60	60	70	70	80	80	100	100	120	120	140	140	170	170	200	200	230	230	270	270

The entry point is 9. In the Swiss model this currently results in those entering the system paying 144% of the average premium. The system responds to at-fault claims against the policy. It does not matter who is driving the insured automobile. For every claim the insured is assessed three malus points against the policy.

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[20] Ontario Task Force on Insurance, Final Report (1986), p. 82.

For example, if there was a claim against the insured's policy at the year of entry, the insured would move from the entry point of 9 to 12. The insured moves one step in the bonus direction for each claim-free year. Premium reductions are implemented at two-year intervals.

The Ontario Task Force on Insurance in its Report referred to bonus/malus as part of its recommendation that "...incentives for good behaviour and penalties or deterrents for bad behaviour should be a part of the auto insurance system."[21] The implementation of bonus/malus was then recommended along with "...safe driving campaigns, better safety standards and equipment, and stricter Criminal Code sanctions...".[22]

The Task Force obviously recognized the need to adjust premiums in response to good (bonus) and bad (malus) driving. No reference was made to Quebec, but it follows that although the Ontario Task Force on Insurance recommended no fault automobile insurance, it rejected Quebec's flat premium rating system. In Quebec, the Régie makes no bonus/malus adjustment in response to claims or conviction experience.

I can readily accept the need to respond to good and bad driving experience through the automobile insurance system, as well as through criminal sanctions, etc. I reject flat premium rating;[23] however, I do not regard the introduction of a bonus/malus system on its own as being workable or consistent with the fundamental principles of insurance which, in a private sector delivery system, must involve grouping of insureds having similar risk characteristics for the purposes of setting premiums. Expected losses have to be assessed as part of the grouping exercise before any particular insured's driving and claims record is known.

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[21] Ontario Task Force on Insurance, Final Report (1986), p. 81.

[22] Ontario Task Force on Insurance, Final Report (1986), p. 81.

Use of vehicle, kilometres driven, territory, years licensed, etc. are statistically sound predictors of risk. A pure bonus/malus system requires the abandonment of these rating variables.[24] The necessity in a pure bonus/malus system of charging demonstrably unequal risks equal premiums at entry violates basic insurance principles and leads to cross-subsidization. That is not to say that an insured's accident record, and for that matter, convictions, have no place in premium-setting. They cannot, however, be used alone. They must be part of a sound classification system consistent with fundamental principles of insurance. Ontario's insurers have always taken account of an insured's accident record in setting premiums. The proposed classification system makes no change in the application of this principle.

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[23] Professor Gaudry's Inquiry Research Study and his Report on the Régie, both provide a useful insight into the impact of flat premium rating.

[24] This may be compared with, for example, British Columbia where a bonus/malus system is used along with some rating variables.

In British Columbia, the I.C.B.C. eliminated age, sex and marital status as rating criteria and at the same time introduced a form of bonus/malus which it called "The Claim-Rated Scale". Although the system has a populist appeal, when examined in light of sound insurance principles, it is manifestly unfair. The I.C.B.C. system results in low risk drivers paying higher premiums than insurance principles say should be the case. The surcharges levied after the fact (and more likely on the higher risk drivers) dilute but do not eliminate this unfairness. As discussed in Chapter 15, this system is unworkable in a private sector delivery system.

How then does bonus/malus seem to work in Switzerland? In Switzerland, 50% of automobile insurance is sold by two insurers. Those two insurers, together with the government, set premium rates. A certain profit margin is built into the rate-making structure. Insureds rarely change insurers. There is no incentive in the system for the consumer to shop around or for insurers to seek to secure business written by other companies, and in that way to increase market share. Competition, as we know it, does not exist. Real competition is restricted to securing the business of those just entering the system. Just as cross-subsidization can be tolerated in a monopoly delivery system (such as exists in jurisdictions where automobile insurance is provided by the government) it can be tolerated in Switzerland's unusual private sector environment.

We must have a classification system which is fair, reliable and objective. Once such a classification system is established, cross-subsidization will be avoided.[25] In general, a bonus/malus system will not only not avoid cross-subsidization, it will likely lead to it.

On a more specific level, I have these comments as to the operation of a bonus/malus system such as exists in Switzerland:

(a) In the Swiss bonus/malus model, the point of entry has been somewhat arbitrarily established. All insureds who enter the system enter at 9. To the extent that new entrants are young drivers, age is not eliminated as a rating variable; nor, of course, is experience, provided the new entrant has no driving experience. New entrants who are experienced drivers, such as those entering the system from another jurisdiction are grouped with those who have limited or no driving experience. Grouping within bonus/malus is accomplished at the point of entry in the sense that all entering are required to enter at the same point (9). This flat premium rating at entry results in manifestly bad risks paying the same premium as good risks. The result is that good risks subsidize the bad risks.

(b) Surcharges and premium reductions are structured without regard to the system's expected loss costs. If there is a systemic shortfall, the premiums of all drivers in the system, good and bad, have to be increased. There is little capacity to predict how many drivers will be at various bonus/malus scale levels. This can lead to a lack of stability on the premium side. The solution, once again, is the cross-subsidization of bad drivers by good drivers.

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[25] Cross-subsidization does occur through the residual market (the Facility Association). Because automobile insurance is compulsory both the government and automobile insurers recognize the need for a residual market. The system can tolerate limited cross-subsidization at that level.

(c) Premium increases and decreases are directly linked to bonus/malus points; relative premium adjustments in response to bonus or malus points are hence predetermined without regard to expected loss costs. If the surcharges imposed on at-fault drivers are insufficient to pay expected loss costs as they always are (because of the relatively few number of accidents), then everyone in the system has to make up the difference. Once again cross-subsidization is the result, although it is reduced to the extent at-fault drivers are surcharged.

(d) In order to operate with any degree of efficiency, a bonus/malus classification system requires full exchange of information among insurers. This is not a major problem in Switzerland in that there are 26 companies and two of them have secured approximately 50% of the automobile insurance business. Moreover, as earlier stated, insureds in Switzerland rarely change insurers.

(e) Injustices can occur because malus points are triggered by claims against the policy, quite apart from the identity of the driver of the insured automobile at the time of an accident. An occasional driver's negligence may result in claims being made against the policy. The owner of the vehicle bears the burden of the resultant premium increase, not the occasional driver. The potential injustice of this can be emphasized by an example. If a teenage occasional driver's negligence in the operation of the family car causes two accidents, the owner of the car will acquire six malus points. If those malus points are imposed from the entry point (9) the insured will be relegated to a 15 rating on the bonus/malus scale. Fifteen claims-free years will have to elapse before the insured is able to secure the best premium rating (0). Six claims-free years will have to elapse before the insured returns to the point of entry (9). At the same time, the teenager may have left home and purchased a new automobile, at which point the teenager is insured at an entry point of 9. I do not regard this as fair.

(f) Bonus/malus responds well to at-fault accident experience; Switzerland has no first party no fault benefits such as we have in Section B of the standard automobile policy. In Switzerland claims against the policy which trigger malus points are third party or collision claims where the insured is regarded as being at fault. A malus adjustment for first party benefits (as exist in Ontario) would not be tolerated in cases where the insured was not at fault. I note that the I.C.B.C. makes no malus adjustment for first party claims against the policy.

(g) In the Swiss bonus/malus scheme, eight years of driving without claims experience will result in the lowest premium rating. In Ontario, the preferred premium rating is achieved by those who have six claims-free driving years.

In Switzerland, age and driving experience are recognized by resort to a third party deductible system. Swiss insurers explained that their third party deductible system is used because of the high accident frequency and severity of young and inexperienced drivers.[26] I regard such a system as separate from bonus/malus and impractical in Ontario where insureds frequently change insurers.

In Ontario those with good driving records pay lower premiums and those with bad driving records are exposed to premium increases. This is a bonus/malus-like response to good and bad driving. What generally distinguishes Ontario's system from the bonus/malus system in Switzerland is that in Ontario not all drivers coming into the system pay the same premium because Ontario insurers and the government reject the principle that all drivers initially represent an equal risk to the system; further, in Ontario, premium increases and decreases are not predetermined but are related to the system's expected loss costs.

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[26] For details of the Swiss third party deductible system see Ontario Task Force on Insurance, Final Report (1986), p. 81.

F. UNDERWRITING

The classification system should not be considered in isolation. Insurance is delivered to consumers through the classification system and the underwriting process. Underwriting is the process of assessing each risk on its own merits. As the Canadian Institute of Actuaries has pointed out,

> In practice, the application of the underwriting function controls the practical impact of the classification system, and misapplication of the classification system in the underwriting process will achieve results different from those intended.[27]

Each insurer has its own underwriting risk evaluation system. Insurers attempt to determine risk characteristics and assess those characteristics over a broad relevant population base to develop a statistical measure of risk quality. Insurers seek to develop a relationship between accident frequency (and, in some instances, severity) and identifiable statistically measurable risk characteristics. The interrelationship among many risk characteristics is assessed on an individual basis as part of the underwriting process. Risk characteristics are often weighted; some are obviously more important than others.

What risk characteristics are considered varies from insurer to insurer. One major insurer uses 37 separate underwriting factors; another (and smaller) insurer uses four. The majority of insureds are dealt with from an underwriting standpoint at the broker or agent level. Many brokers have authority to bind the insurer to a risk. The broker or agent follows the insurer's underwriting policies.

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[27] See Canadian Institute of Actuaries, Risk Classification.

Underwriting criteria used by insurers are not necessarily causal; in their application they are said to establish a correlation with accident probability. For example, pure stability underwriting criteria such as residence ownership, years at residence and years at present employment are used for underwriting purposes by some insurers. It can be argued that how long a person has resided at a given residence can have nothing to do with the probability of that person being involved in an accident. No one could elevate the connection with accident probability to more than a correlation.

I have referred to home ownership not because it is unusually important, but rather to illustrate that insurers have the view that home owners, particularly those who have lived in the same residence for more than a brief time, are less likely to be involved in an accident than similarly situated risks who do not own homes. Home ownership, of course, means little or nothing on an individual basis. If, however, the accident experience of a large number of insureds is taken into account, the accident experience of homeowners is said to be better than the accident experience of those who do not own their own homes. There is in that sense no causal connection between home ownership and accidents, merely a correlation.

Underwriting practices also have significant consequences in the substandard market. The few companies competing for business that the regular market will not write, attempt to identify risks that are surchargeable, but which can be profitably underwritten in that grey area between the regular market and the Facility Association. As earlier stated, some substandard insurers will underwrite a person convicted of impaired driving, but not a newly-licensed driver. This represents further evidence that however sophisticated an insurer's underwriting policies may or may not be, age and driving experience is a significant underwriting factor. Elimination of age in the classification system will not result in its demise as an underwriting factor. The same can be said of sex and to a lesser extent marital status.

The somewhat pejorative term "creaming" is applied to the underwriting process when it rises or descends (depending on your point of view) to the point where preferred risk selection becomes central to an insurer's underwriting and marketing policies. In a very general way, some companies seek to insure demonstrably good risks at relatively low premiums, as opposed to poorer risks at higher premiums.

In Chapter 4, dealing with Marketing, I referred to insurers' demands of brokers related to mix of business and accompanying business. These requests generally force brokers to secure a certain number of homeowners' policies per automobile policy written (mix of business); or the broker is required to write the homeowner's policy in addition to an automobile policy before the insurer will accept an applicant's automobile insurance business (accompanying business). I have reviewed some cases where the accompanying business edict was embellished by the additional requirement that the home to be insured in the accompanying business package have a certain minimum value. This kind of underwriting and marketing has nothing to do with the classification system; however, it affects the consumer's access to insurance in a very real way. Accompanying business and mix of business demands obviously result in the insurer writing additional business. Homeowner's insurance tends to be more profitable than automobile insurance. There is, however, more to it than that. Requiring an insured who seeks automobile insurance to purchase homeowner's coverage is a form of "creaming" in that it isolates only those applicants for insurance who own a home to insure. As stated earlier, homeowners are thought by most insurers to be better risks than non-homeowners.

Some insurers regard the frequency with which an applicant for insurance has changed automobile insurers as an underwriting factor of some significance. One insurer's rate book provided that if a person seeking automobile insurance had more than three different insurers in the past five years, the business was not to be underwritten.[28] This automobile insurance promiscuity factor is mostly cost, as opposed to risk-related. Loss ratios on new business are higher than loss ratios for renewal business. This is because insurers have an actual experience record to work on with respect to old business; insurers will cancel or not renew existing business that is deemed to be too risky. Further, the administrative expense attendant upon the renewal of a policy is significantly less than the administrative expense attendant upon writing new business. The policy of refusing to write applicants for automobile insurance who have changed insurers too frequently is unacceptable. If this policy became widespread it would for all practical purposes render the private sector delivery of insurance irrelevant, in that true competition and the right to choose insurers is the substantive benefit derived from the private sector provision of insurance. The resort to the number of insurers anyone has had over any particular timeframe should be prohibited, and deemed an unfair underwriting practice.

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[28] The insurer to which I refer based its decision not to insure anyone who had changed insurers more than three times in the past five years on two factors:
(a) loss ratio of new business said to be 20-25% higher than the remainder of the insurer's portfolio; (b) the cost of underwriting, processing and issuing a new policy was $92 and the cost of renewing an existing policy was $10.

The relationship between the classification system, underwriting and marketing cannot be ignored. All have a direct impact on both the availability of insurance in the regular market, and its cost. Even if insurers were required to take all comers, there would be underwriting complaints, although they likely would be fewer in number than is now the case.

It seems to me that there are two major problem areas as I assess underwriting-related complaints. First, because vehicles, not drivers, are insured, the risk presented by an occasional driver, as well as the risk presented by the named insured, is quite properly taken into account at the underwriting level. This can have a significant effect on premiums. For example, an insured whose spouse (an occasional driver) has been convicted of impaired driving, is exposed to a substantial premium increase because of the occasional driver's driving-related criminal record. Another common example is the insured who has a teenage son of driving age listed as an occasional driver. This, too, causes an increase in the insured's premium.

Because the insurance contract insures the named insured and anyone driving the insured automobile with the named insured's consent, insurers have to take the risk presented by occasional drivers into account. In light of the terms of the insurance contract, it is not surprising that insurers are reluctant to accept the assertion a particular occasional driver will not be given consent to drive the insured automobile. On the other hand, insureds who have no intention of consenting to an occasional driver's use of the insured automobile feel justifiably aggrieved by having to pay a higher premium. In many instances, consumers have attempted to convince the insurer that a particular person will not be permitted to drive. To remedy this situation, provision should be made to exclude named occasional drivers from coverage, in circumstances where both the named insured and the occasional driver have acknowledged in writing that coverage is not sought and is not to be extended to the named occasional driver.

The Superintendent of Insurance has taken steps to make this relief available through what is known as the automobile industry's "spouse in the house" coverage exclusion. The Superintendent's initiatives should be pursued to a conclusion. This will have a substantial effect on premiums in some cases.

If that coverage exclusion were to be implemented, the excluded occasional driver would be in violation of the Compulsory Automobile Insurance Act,[29] were that driver to be driving the insured vehicle at all. A new offence should be created so as to penalize the named insured in those cases where the named insured has given consent to the excluded occasional driver's use of the insured vehicle. A new offence short of theft and in addition to driving without insurance should be established to penalize an excluded occasional driver who has driven the insured's car with or without consent.

In the final analysis, it is essential that the named insured and the excluded occasional driver appreciate that the excluded occasional driver cannot drive the insured motor vehicle from both an insurance coverage standpoint, and from the standpoint of quasi-criminal sanctions which will be attracted by the excluded occasional driver's use of the insured vehicle.

G. UNDERWRITING AND THE FACILITY ASSOCIATION

Supposedly, drivers in the Facility Association cannot obtain insurance in the regular market. One might think that all drivers in the Facility Association would, therefore, have some combination of accidents and convictions, etc. that resulted in those drivers being relegated to the Facility Association. Facility Association records, however, disclose that 29% of drivers in the Facility Association are clean drivers. Clean drivers are those drivers who have driving/conviction records which do not expose them to surcharges.

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[29] R.S.O. 1980, c. 83.

There is a substantial difference between Facility Association premiums and regular market premiums. Many think that clean drivers in the Facility Association should not be exposed to the Facility Association premiums. A number of questions arise. Why are those clean drivers in the Facility Association in the first place? Should those clean drivers in the Facility Association be exposed to the relatively large premium differential above referred to? There is no one answer to the first question. Most clean drivers in the Facility Association are there because an agent or broker or an insurer's internal underwriting department somehow concluded that there was something inappropriate about the risk. This is sometimes, but not always, more than underwriting by intuition. On some occasions, legitimate underwriting suspicions will arise. A common example is the situation presented to a broker acting as an insurer's front line underwriter when an insured who seeks insurance may be thought not to be the true owner of the vehicle for which coverage is sought. Because insurance is expensive for those with accident or conviction records and for young drivers, some seek coverage through a person located in a lower risk cell of the classification system. An example given to me was a grandmother who attempted to insure "her" 1986 Corvette. The car, in reality, was not owned by the person seeking coverage.

In that I viewed examples like this as somewhat isolated, I initially concluded that it was simply wrong that 29% of drivers in the Facility Association were clean drivers. The I.B.C. seemingly agreed. It was proposed that those drivers with four or more "events"[30] against the insured's driving record in the past three years would be relegated to the Facility Association, but those with less than four events in the past three years, if unable to obtain regular market coverage, would go into the Facility Association pooling arrangement at the insurer's regular book premium. The President of the Insurance Bureau of Canada put it this way:[31]

> Perhaps the intent is best summarized by the statement on page 10 of our Supplementary Submission that 'business going into the Association will consist of risks which the voluntary market should not be expected to assume'. In very broad terms, a risk would definitely not be forced into the Facility Association simply because of inexperience regardless of age nor would a risk with one or two accidents and/or Highway Traffic Act violations. These would be eligible for pooling and, as such, would be written at the insurer's normal premiums for such a risk. The rates would of course be higher than rates for experienced drivers without accidents or convictions but would definitely be less than Facility Rates.

I endorse the concept of subdividing Facility Association private passenger business between demonstrably bad risks, and those which cannot be so described. It seems to me, however, that caution is required. It is tempting to conclude that clean risks do not belong in the Facility Association. That conclusion is, of course, premised upon the assumption that the regular market should insure so-called clean drivers. If, however, the clean driver/Facility Association issue is taken one step further, it would appear that on an aggregate basis, underwriters may well have been correct in declining to write some of the claims business that was referred to the Facility Association. At my request, the General Manager of the Facility Association secured loss ratio information referable to the clean driver population of the Facility Association. Clean drivers in the Facility Association had a loss ratio of 214. The clean driver loss ratio was conspicuously higher than the loss ratio for surcharged drivers in the Facility Association. It is reasonable to conclude that on an aggregate basis, underwriters refusing to write those clean drivers that are now in the Facility Association, were correct. This means, of course, that if premiums are reduced for that part of the Facility Association population, the loss ratio will be even higher. The remainder of Ontario's drivers are already subsidizing Facility Association drivers in that Facility Association premium rates are not sufficient to meet expected loss costs. It must be recognized that any steps taken to lower rates in the Facility Association will in all likelihood lead to further cross-subsidization.

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[30] The following will outline what the I.B.C. regards as an event: "Three minor Highway Traffic Act convictions equals one event. Every two additional minor Highway Traffic Act convictions equals one event. Every major Highway Traffic Act conviction equals one event. Every Criminal Code or serious driving related conviction equals two events. Every accident equals one event."

[31] See letter from J. L. Lyndon, (September 30, 1987).

Nevertheless, there is an existing problem with respect to clean drivers in the Facility Association who should not be there in the first place. Assuming the Facility Association/regular market premium gap is to be narrowed, at least for clean drivers, the loss experience of that pooled group should be continually monitored. Steps should be taken to attempt to identify those clean risk drivers who demonstrably do not belong in the

Facility Association from those risks, clean or otherwise, that the regular market cannot reasonably be expected to underwrite. I will deal with Facility Association rates and their regulation together with related social policy issues in Chapter 16.

Finally, during the course of this Inquiry, the I.B.C. and the I.B.A.O. in a bulletin dated March 10, 1987 jointly sought to come to grips with the problem of so-called "grey" risks. These "grey" risks constitute many of the 29% clean drivers in the Facility Association. The I.B.C./I.B.A.O. perception of the problem and proposed solution warrant full reproduction of the bulletin to which I have just referred. It is as follows:

> March 10, 1987
>
> **MEMORANDUM**
>
> TO: Every Ontario Insurance Broker
>
> FROM: Steve Kaluski
> President
> Insurance Brokers Association of Ontario
>
> John L. Lyndon
> President
> Insurance Bureau of Canada
>
> RE: Automobile Insurance Marketing Changes
>
> Everyone employed in Ontario's property/casualty insurance industry is aware by now of the possibility of the nationalization of Ontario's car insurance business. We are pleased to announce some of the initiatives that have been undertaken by members of the Insurance Bureau of Canada which we feel will help to preserve the present system.
>
> Starting immediately, the Chief Executive Officers of most of Ontario's insurers have instructed their staff to relax the very strict underwriting rules which have been employed in recent months. Companies will once again entertain submissions of so-called "grey" risks

rating is by territory, engine size and recognizes the distinction between on and off-road motorcycles. I will deal specifically with motorcycle coverage and premium rating in Chapter 12.

(b) All-terrain vehicles

There are an increasing number but still relatively few of these vehicles. The Motorcycle and Moped Industry Council has suggested that risk assessment and premium determination for all-terrain vehicles has been done by the insurance industry in a "closeted atmosphere". I hope this concern will be eliminated by full discussion of the proposed classification system. It is suggested that three-wheel all-terrain vehicles are rated in the same way as on-road motorcycles in the face of the Ministry of Transportation and Communications' data indicating that this is inappropriate. The basic premium-rating for three-wheel all-terrain vehicles, four-wheel all-terrain vehicles and other off-road vehicles, such as snowmobiles, is brought into question by the Motorcycle and Moped Industry Council. This should be examined as part of structuring the new classification system.[33]

(c) Taxis

Taxis present a unique premium problem. This problem has received much media exposure during the past year. Not surprisingly, the problem is the extraordinarily high premium level to which some taxi operators in Ontario are exposed. Various associations representing taxi operators have sought relief from these high premiums. The main problem area is Toronto. The Toronto Taxicab Brokerages Association (T.T.B.A.) made a submission to me and to the Minister of Financial Institutions seeking relief through government intervention or, if need be, government-delivered automobile insurance.

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[33] See Motorcycle and Moped Industry Council's Submission, p. 4 and Appendix B.

The root cause of the taxi industry's premium problems is high loss costs. Even at the high current premium levels, the Facility Association, which insures 46% of taxis in Ontario and 50% of taxis in Toronto, is losing money on its taxi business.[34] Premiums, in other words, are too low. Ontario motorists generally are subsidizing taxis, and taxi operators outside of Toronto are subsidizing taxi operators located in Toronto. It is quite apparent that in short order, the private sector insurance industry will view fleet taxis (taxis not owner-operated or run through a legitimate co-operative) as close to uninsurable in the regular market, if significant improvement in taxi-related losses is not forthcoming.

Representatives of the taxi industry do not deny the horrendous loss costs. In the T.T.B.A.'s submission to the Minister of Financial Institutions it is suggested that at least one of the causes of the problem is "...the aggressive nature of many drivers...". That submission also refers to "...an exceptionally high turnover rate of drivers in our industry, resulting in a high number of inexperienced drivers on the road." The T.T.B.A. also blames the insurance industry as a whole for not better informing taxi drivers of the benefits of good driving and the risks attendant upon bad driving. The insurance industry deserves criticism for many things but failure to explain the benefits of safe driving to taxi drivers can hardly be included in the list.

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[34] See Facility Association, "Presentation to Metropolitan Toronto Licensing Commission" (June 22, 1987).

The taxi industry may have come to grips with the need for risk management, including more direct involvement of the owner of a taxi licence with the operation of the taxi, better control over drivers and their records, more specific licensing requirements and the introduction of a new classification of driving licence for taxi drivers.

In the 1987 Report of the insurance working group of the Metropolitan Licensing Commission, these and other recommendations were made. I endorse these recommendations, but remain pessimistic about the situation improving until the owners of taxi plates have a direct stake in who is driving the taxi and how it is driven.

It is obvious that there is no one solution to the taxi premium problem. Accidents involving taxis have to be reduced. Better driver education and control, perhaps through the use of incentives as suggested by Professor Wilde in his Inquiry research study, would be a step in the right direction.[35] In the meantime, taxis will be increasingly insured in the residual market. Premiums for taxis in the residual market are far below what expected loss costs would suggest those premiums should be. A social policy decision will have to be made as to the extent to which Ontario's drivers are to be asked to subsidize taxis. I recognize that there is a social need for taxis; in congested urban areas, such as downtown Toronto, taxis are a necessity. I have no basic objection to some degree of subsidization for taxis. It seems to be sadly inevitable. Something must be done about the root causes of the problem, which I view as being owner neglect, driver incompetence and instability.

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[35] See Inquiry Research Study VI.

(d) Trucks

Those representing the trucking industry, such as the Ontario Trucking Association (O.T.A.), express concern about the trucking industry's third party premium exposure. Just as motorcycles present a high first party premium problem, trucks present a high third party premium problem. It works this way: motorcycles cause relatively little damage to other vehicles or property, but first party motorcycle exposure is high because motorcycle drivers and passengers are relatively unprotected. On the other hand, trucks have the capacity to cause significant damage to others. Those in a truck are relatively well protected and are often covered for economic loss by the Workers' Compensation system. The result is that first party no fault premiums (Section B) are low for trucks and third party liability premiums (Section A) are high. The O.T.A., which represents approximately 800 trucking companies, endorsed a form of threshold no fault. The O.T.A. expressed distinctly qualified enthusiasm for pure no fault by recommending its adoption "as a last resort".

As I understand the O.T.A.'s position, non-pecuniary general damages should be limited "...unless a definitive and foolproof tort threshold is reached...".[36] The object of the limitation suggested by the O.T.A. is the reduction, or at least the control, of insurance premiums at the third party level.

Although problems related to automobile insurance were generally thought to be separate from the liability insurance crisis of 1985-86, there is no doubt that the liability insurance crisis did have an effect on truckers' access to liability coverage and on the affordability of coverage which was available. The collapse of the United Canada Insurance Company (a company which insured about 40% of truckers) resulted in many truckers being cast adrift, and required to look elsewhere for insurance. The result was that the Facility Association truck population increased significantly by the end of 1986. The truckers' position is that when coverage is compulsory the government must see that it is provided at affordable rates. This position is taken notwithstanding the fact that truckers are engaged in commercial ventures in which costs, for the most part, are passed on.

The O.T.A.'s submission to the Ontario Task Force on Insurance emphasized coverage and affordability problems attendant upon the proclamation of legislation such as Part IX of the Environmental Protection Act.[37] Concerns about environmental exposure are beyond the scope of this report. However, any legislation which increases the exposure of an identifiable group, such as the trucking industry, should take insurance-related issues into account.

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[36] O.T.A. submission (February 1987).

[37] The so-called "Spills Bill", Part IX of the Environmental Protection Act, R.S.O. 1980, c. 141 was proclaimed in force November 29, 1985. See Ontario Trucking Association submission to Ontario Task Force on Insurance (March 21, 1986), p. 2.

CHAPTER 7

LOSS COSTS AND PREMIUMS

A. LOSS COSTS

From an insurance standpoint, the crucial statistical measurements are the number of accidents per 100 vehicles insured and the loss costs attributable to those accidents. Unlike those having an interest in accident prevention, insurers focus on the number and severity of accidents per 100 vehicles insured, not the kilometres driven by those insured.

Table 7.1 below sets out the claims frequency per 100 cars insured in all provinces except for Manitoba and Saskatchewan.[1] The Quebec experience represents that of private sector insurers operating in Quebec, not the Régie.

In assessing any data dealing with claims, care must be taken with the definition of a claim. Although there is a direct relationship between a claim and an accident, the terms of reference are different. Insurers do not have a universal definition of what a claim is; therefore, caution must be exercised in dealing with individual insurer's claims-related data.

Table 7.1 has been included to show a claims frequency comparison between Ontario and other provinces. As long as the definition of a claim is consistent for those purposes, it does not matter what the definition is.[2]

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[1] Frequency data are not readily obtainable for Manitoba and Saskatchewan.

Table 7.1

CLAIMS FREQUENCY PER 100 CARS INSURED*

BODILY INJURY AND PROPERTY DAMAGE[3]

JURISDICTION	1983	1984	1985	1986
Alberta	5.4	5.3	5.6	5.8
New Brunswick	5.3	5.5	5.3	5.4
Newfoundland	5.8	5.9	5.5	5.3
Nova Scotia	4.8	5.0	5.1	4.9
Ontario	5.4	5.9	6.0	5.6
P.E.I.	5.1	5.6	5.2	5.3
Quebec	8.2	10.1	10.3	10.0
N.W.T.	3.5	3.4	2.9	2.7
Yukon	4.0	3.5	3.6	4.5
British Columbia	7.8	7.8	8.1	8.6
Canada**	6.5	7.0	7.1	6.9

* A "car insured" refers to a single car insured for 12 months. Thus if two cars are insured for six months each or three cars are insured for four months each, the total in every case would be one "car year" of insurance.

** Does not include British Columbia, Manitoba, Saskatchewan or Quebec no fault.

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[2] Because the statistics for British Columbia are drawn from a different data source, it is impossible to verify the British Columbia claims frequency figures. It seems reasonably clear that the I.C.B.C. definition of a "claim" is different from the I.B.C.'s definition of a "claim". This difference would, at least in part, explain the relatively high British Columbia bodily injury claims frequency figures.

[3] Insurance Bureau of Canada Automobile Insurance Experience, 1985 (except data for British Columbia which were provided by the Insurance Corporation of British Columbia).

Table 7.2 provides a breakdown of Ontario bodily injury and property damage accidents, from the standpoint of both frequency and severity, in the years 1977 to 1986. Because bodily injury and property damage coverage is compulsory, the same number of vehicles were insured for bodily injury and property damage in each year.[4]

TABLE 7.2

ONTARIO BODILY INJURY/PROPERTY DAMAGE SUMMARY ($CURRENT)

BODILY INJURY

Year	Number of cars	Losses $	CPI	Loss per car	Costs per claim	Claims freq. /100 cars	Number of claims
1977	2,993,943	180,744,938	67.9	60	6,098	0.99	29,640
1978	3,155,064	223,283,879	73.9	71	7,077	1.00	31,551
1979	3,320,756	263,569,068	80.7	79	8,918	0.89	29,555
1980	3,420,996	325,747,239	88.9	95	10,580	0.90	30,789
1981	3,475,637	391,259,408	100.0	112	12,508	0.90	31,281
1982	3,513,525	416,726,552	110.8	119	13,478	0.88	30,919
1983	3,597,887	512,499,215	117.2	143	16,005	0.89	32,021
1984	3,743,562	632,447,098	122.3	169	16,563	1.02	38,184
1985	3,895,781	774,54,270	127.2	199	18,409	1.08	42,974
1986	4,028,116	860,303,263	132.4	214	19,594	1.09	43,906
PROPERTY DAMAGE							
1977	2,993,943	138,141,428	67.9	46	743	6.21	185,924
1978	3,155,064	159,918,836	73.9	51	802	6.32	199,400
1979	3,320,756	191,864,648	80.7	58	941	6.14	103.894
1980	3,420,996	217,582,188	88.9	64	1,078	5.90	201,839
1981	3,475,637	237,864,950	100.0	68	1,182	5.79	201,239
1982	3,513,525	222,930,350	110.8	63	1,249	5.08	178,487
1983	3,597,887	217,754,195	117.2	61	1,339	4.52	162,624
1984	3,743,562	254,711,958	122.3	68	1,400	4.86	181,937
1985	3,895,781	290,304,250	127.2	74	1,527	4.88	190,114
1986	4,028,116	318,022,175	132.4	79	1,739	4.54	182,876

Note: It should be noted that because of the I.B.C. definition of a claim, the figure for average cost per claim cannot be interpreted as cost per person.

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[4] This coverage is contained in Section A of the Standard Automobile Policy.

The loss costs per vehicle[5] for property damage have remained relatively stable. This stability exists even without adjusting the property damage loss costs per car for inflation. The property damage claims frequency per 100 cars insured has declined from a high point of 6.32 in 1978 to 4.54 in 1986. The bodily injury claims frequency per 100 cars insured has increased from a low (.88) in 1982 to a high point in 1986 (1.09).

Table 7.3 presents the same bodily injury/property damage breakdown as to losses, loss cost per car and average claims cost for bodily injury and property damage as in Table 7.2, but adjusted to 1981 dollars. It is apparent that property damage losses seem to be under control. Bodily injury loss costs increased slightly in 1986. As can be seen from Table 7.3, there has been a steady increase in bodily injury loss costs since 1982.

Tables 7.2 and 7.3 provide a clearer picture of the progression of bodily injury/property damage loss costs from 1977 to 1986. Both tables show the relative stability of property damage loss costs. The bodily injury picture is different. The average cost of a bodily injury claim has risen from $6,098 in 1977 to $19,594 in 1986, an increase of 221% (Table 7.2). In constant (1981) dollars the percentage increase in bodily injury average claims cost is 65% (Table 7.3). When bodily injury claims costs are measured by vehicles insured it is apparent that bodily injury loss costs per car have risen from $60 in 1977 to $214 in 1986 (Table 7.2). This represents an increase of 257%. In 1981 dollars (Table 7.3), the increase is from $89 per car to $161 per car, an increase of 81%.

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[5] The term "loss costs" as used by insurers and referred to here, includes claims actually paid and claims adjustment expense paid, reserves established for unpaid but reported claims and reserves established for claims incurred, but not reported (I.B.N.R. reserves).

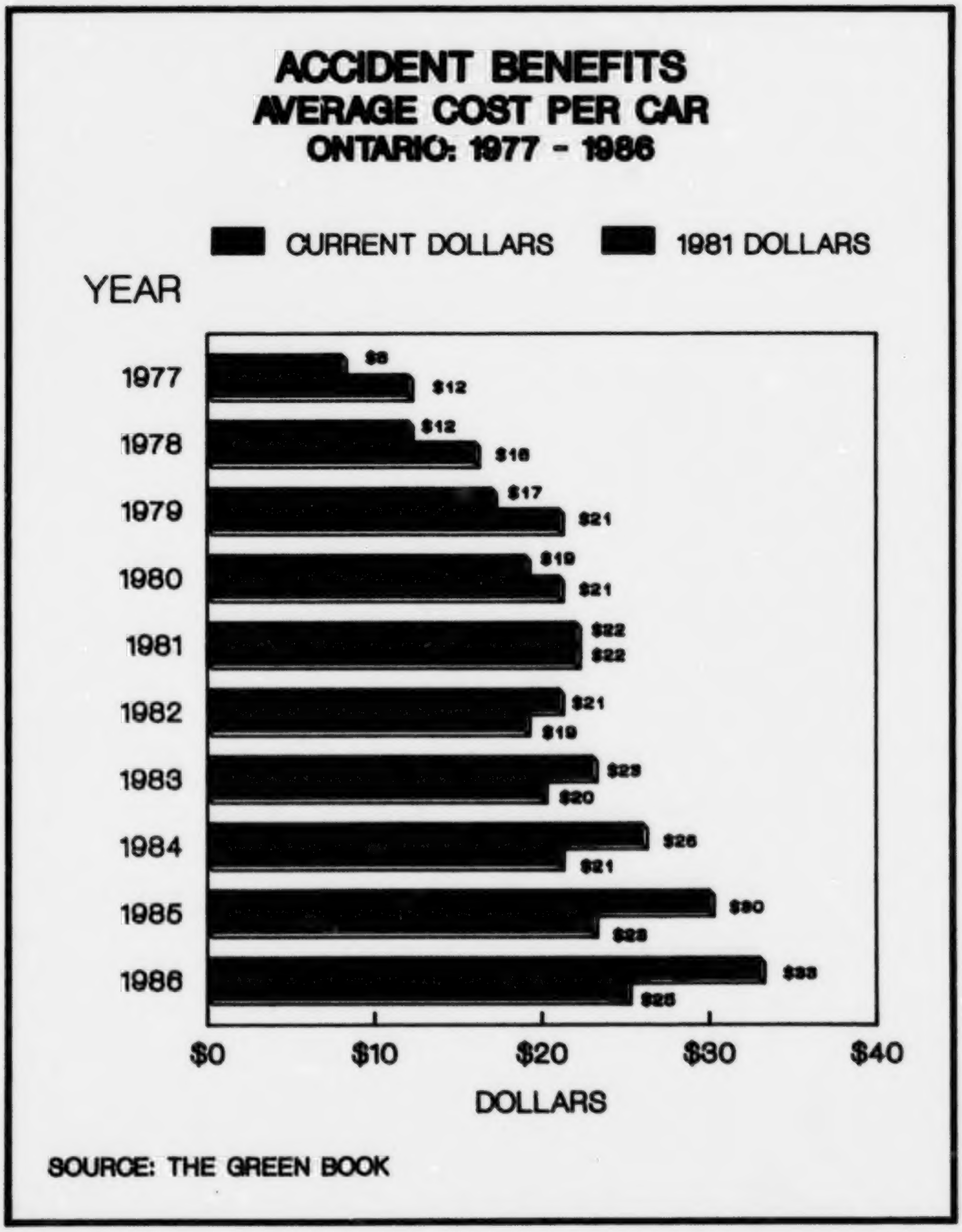
Figure 7.1 provides the same information as Table 7.2, except that the Figure 7.1 information is related to the

Table 7.3

ONTARIO BODILY INJURY/PROPERTY DAMAGE SUMMARY (1981 Dollars)

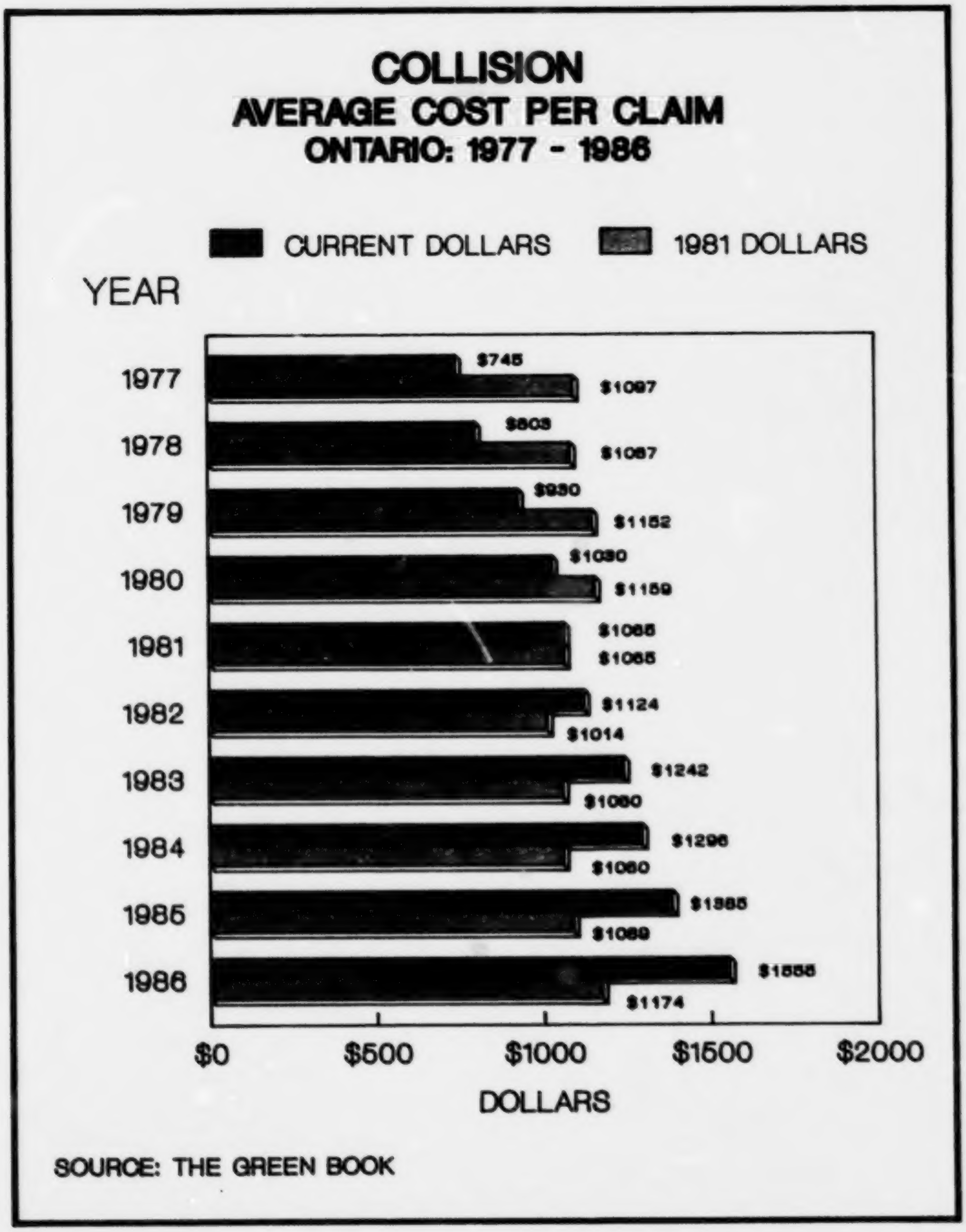
Year	Losses ($1981)	Loss/car (1981) $	Cost per claim (1981) $
BODILY INJURY			
1977	266,192,839	89	8,981
1978	302,143,274	96	9,576
1979	326,603,554	98	11,051
1980	366,419,842	107	11,901
1981	391,259,408	113	12,508
1982	376,106,996	107	12,164
1983	437,286,019	122	13,656
1984	517,127,635	138	13,543
1985	608,921,596	156	14,472
1986	649,775,879	161	14,799
PROPERTY DAMAGE			
1977	203,448,348	68	1,094
1978	216,398,966	69	1,085
1979	237,750,493	72	1,166
1980	244,749,367	72	1,213
1981	237,864,950	68	1,182
1982	201,200,677	57	1,127
1983	185,797,095	52	1,142
1984	208,268,159	56	1,145
1985	228,226,612	59	1,200
1986	240,198,017	60	1,313

Figure 7.2



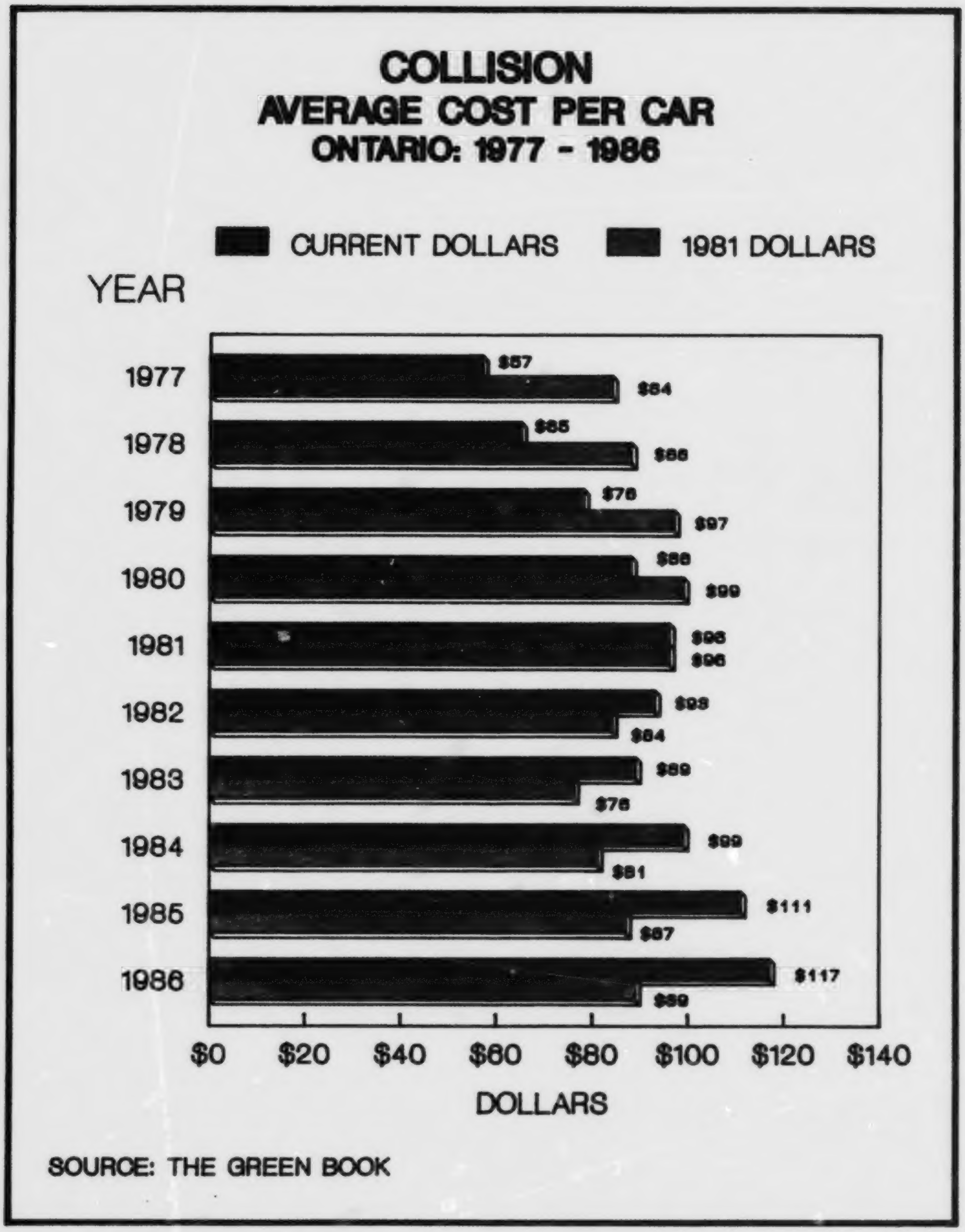
SOURCE: THE GREEN BOOK

Figure 7.3



SOURCE: THE GREEN BOOK

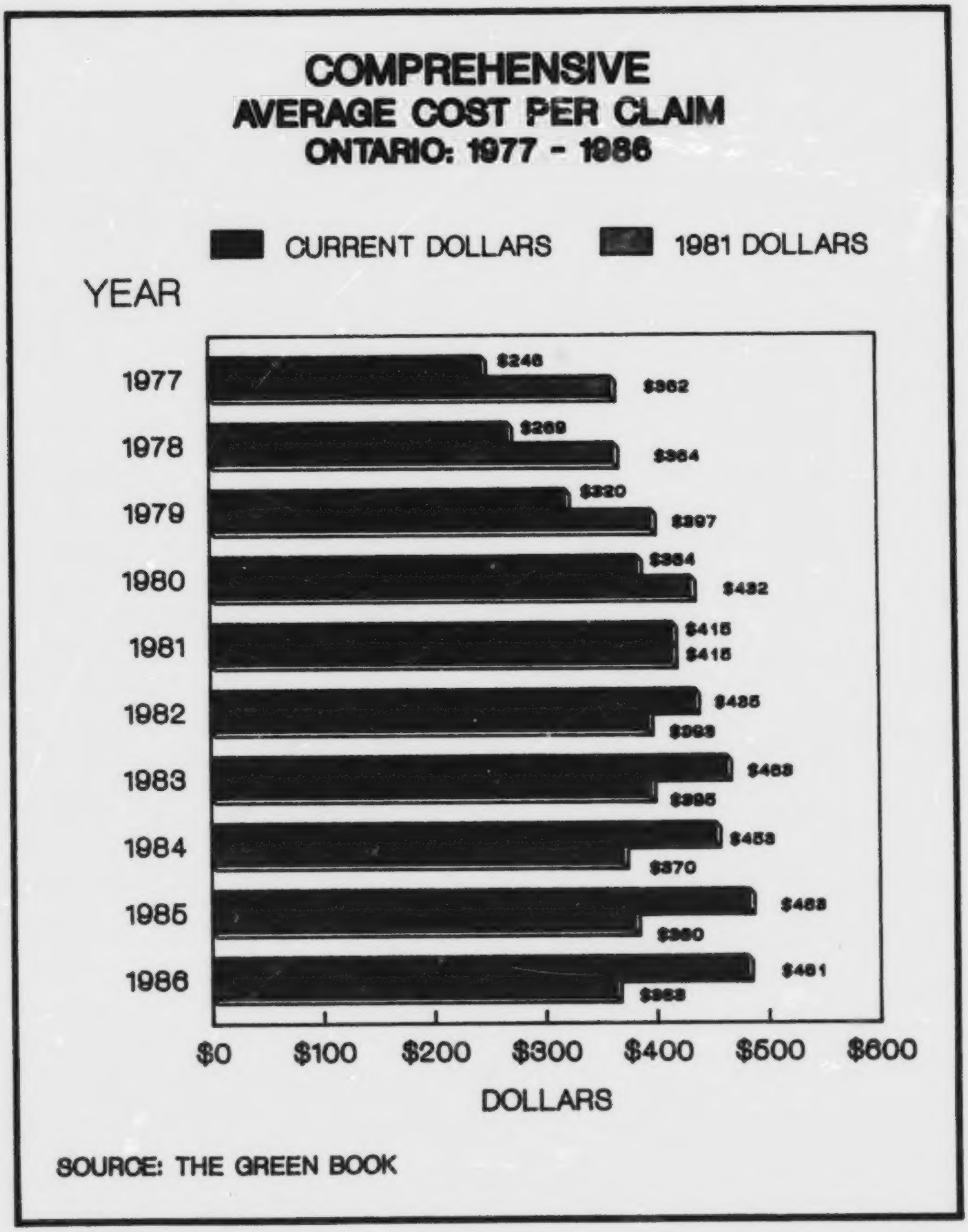
Figure 7.4



COLLISION
AVERAGE COST PER CAR
ONTARIO: 1977 - 1986

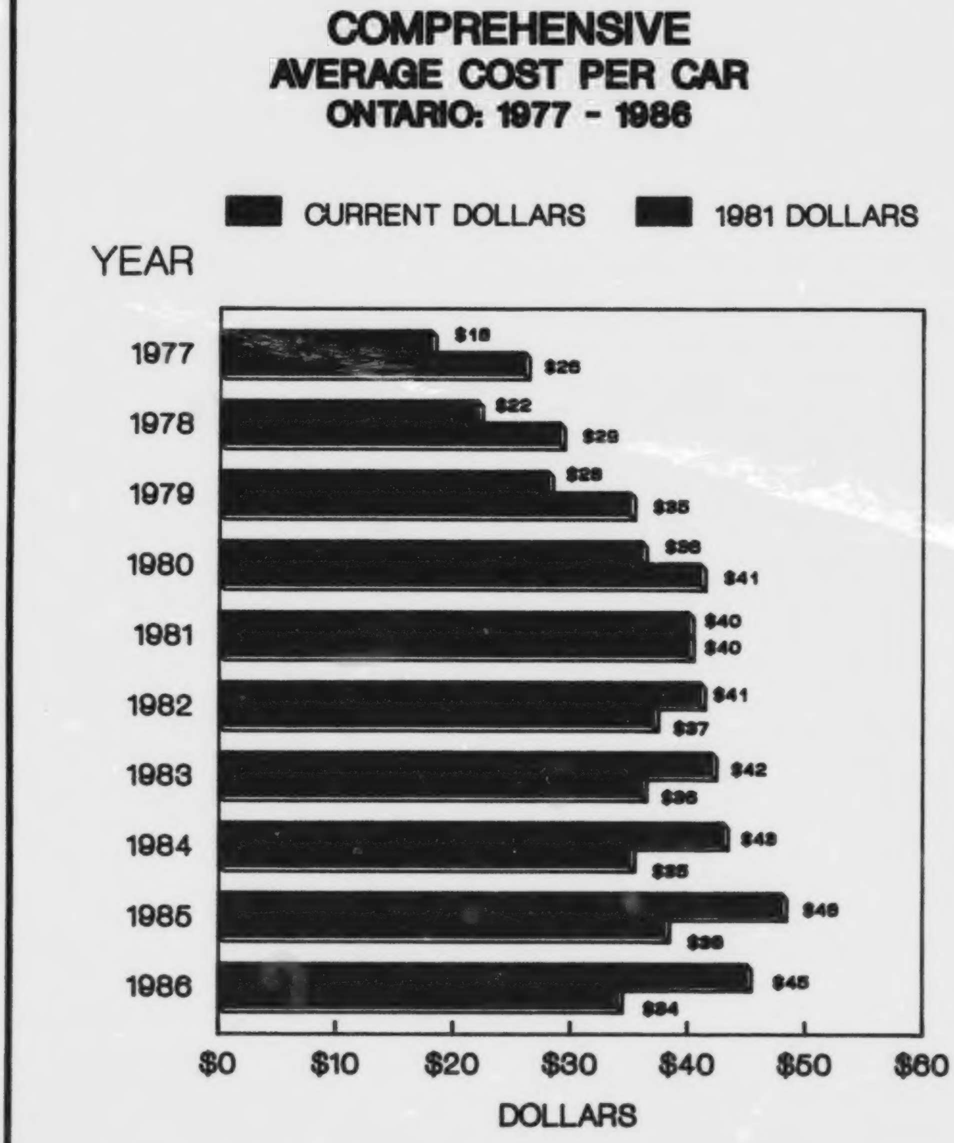
SOURCE: THE GREEN BOOK

Figure 7.5



SOURCE: THE GREEN BOOK

Figure 7.6



SOURCE: THE GREEN BOOK

Two bodily injury claims surveys undertaken by this Inquiry have developed reliable evidence as to the anatomy of bodily injury claims. Because the claims surveys dealt with closed claims, the issue of reserves did not have to be considered.[8]

The first claims survey analyzed 1,594 claims files closed in 1986 in which almost $22 million was paid to claimants. For reasons more fully developed in Appendix III, I am satisfied that the claims survey data and the conclusions to be drawn from them are reliable. The judgment or settlement bodily injury claims cost breakdown as set out in Figure 7.7 was calculated on the basis of all surveyed claims. The proportions changed when claims of specific sizes were assessed. Figure 7.8 shows the breakdown for claims resolved by settlement or judgment between $1 and $10,000. Figure 7.9 represents the breakdown for claims resolved by judgment or settlement between $10,001 and $75,000. Figure 7.10 is a similar breakdown for claims over $75,000.

The second bodily injury claims survey was undertaken specifically to collect data as to the impact of the collateral source rule. It was also undertaken to verify the claims results of the first claims survey. Because insurers cannot deduct collateral source payments received by a claimant, the payments are often not recorded, with the result that the impact of the collateral source rule remained uncertain. The second bodily injury claims

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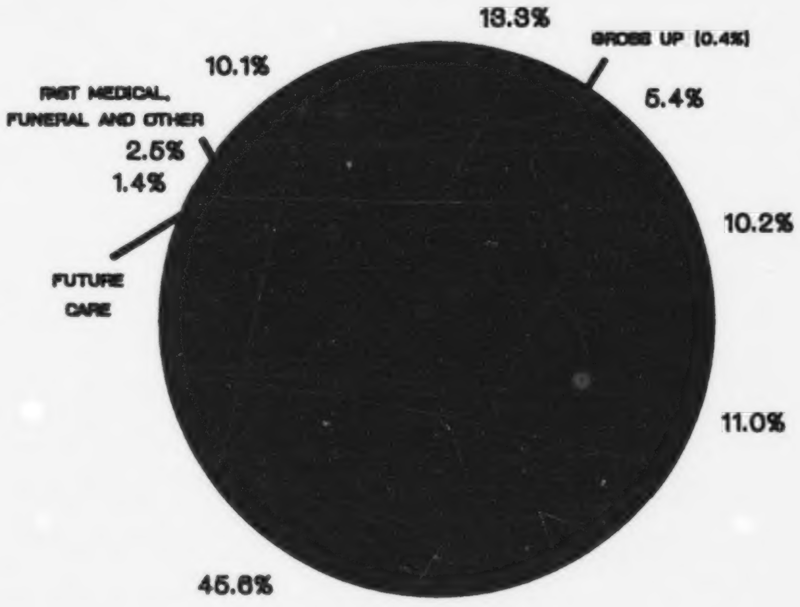
[8] For an explanation of the structure and reliability of the bodily injury claims survey, see Appendix III.

Figure 7.7

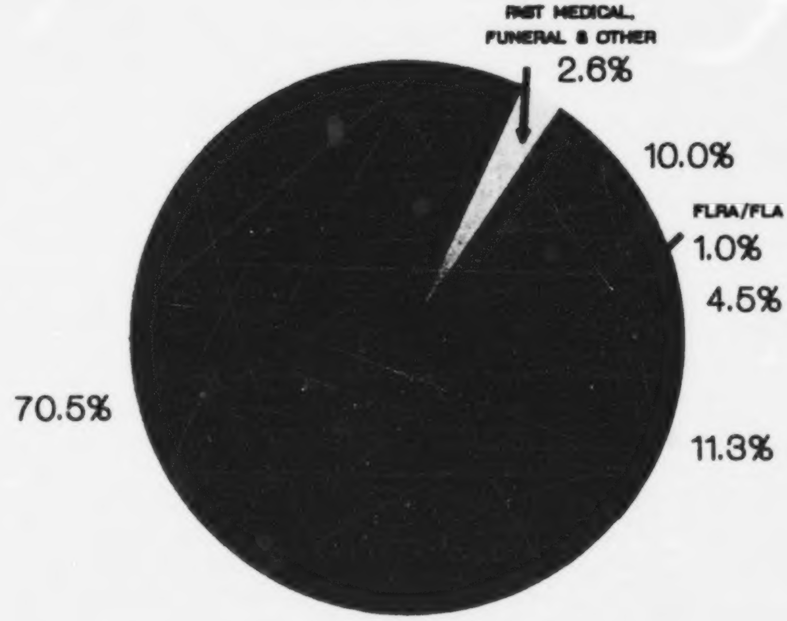
BREAKDOWN OF JUDGEMENT/SETTLEMENT
BODILY INJURY CLAIMS: ALL CLAIMS
ONTARIO: 1986



SOURCE: CLAIMS INFORMATION SURVEY

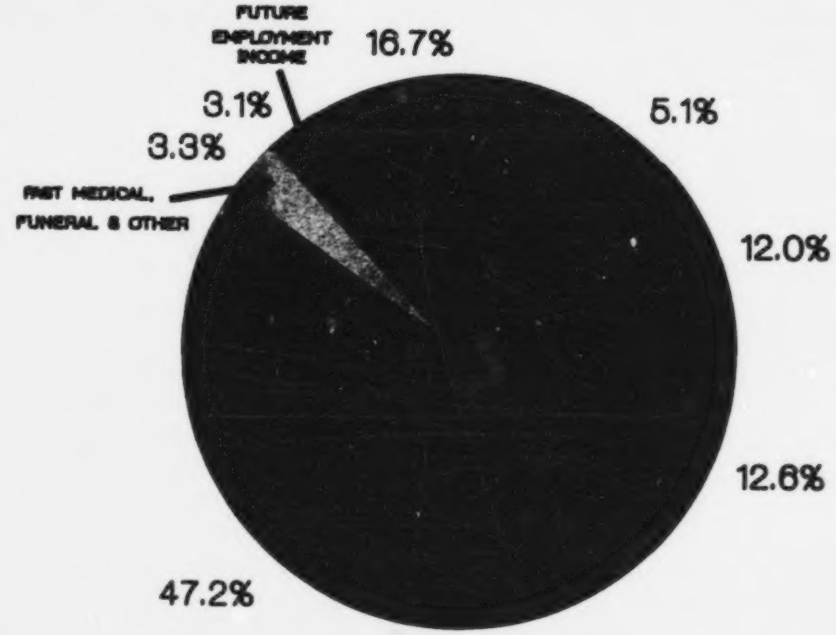
Figure 7.8

BREAKDOWN OF JUDGEMENT/SETTLEMENT
BODILY INJURY CLAIMS: $1 TO $10,000
ONTARIO: 1986



SOURCE: CLAIMS INFORMATION SURVEY

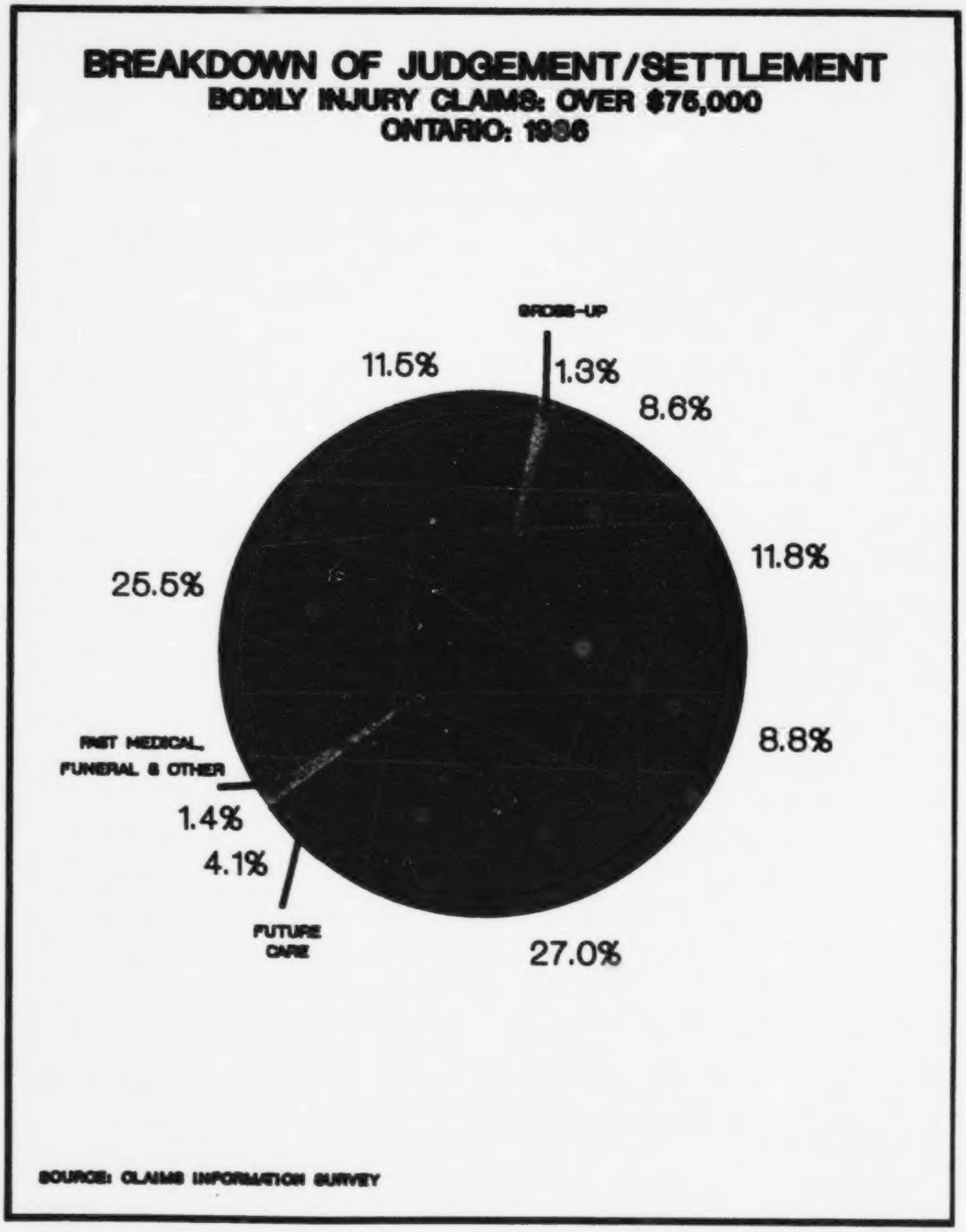
Figure 7.9



BREAKDOWN OF JUDGEMENT/SETTLEMENT
BODILY INJURY CLAIMS: $10,001 TO $75,000
ONTARIO: 1986

SOURCE: CLAIMS INFORMATION SURVEY

Figure 7.10



BREAKDOWN OF JUDGEMENT/SETTLEMENT
BODILY INJURY CLAIMS: OVER $75,000
ONTARIO: 1986

SOURCE: CLAIMS INFORMATION SURVEY

survey required insurers to record a complete breakdown of all claims over $5,000 as those claims were being closed by settlement or trial over a six-week predetermined period in 1987. Where files did not contain collateral source information, insurers were asked to get it. All of the insurers involved cooperated.[9]

As shown in Figures 7.7 through 7.10, non-pecuniary general damages (pain and suffering, loss of enjoyment of life) represent the single most significant segment of damages, at all levels. It is clear that as the size of the claim increases, the proportion of non-pecuniary general damages decreases. In smaller claims (claims between $1 and $10,000) non-pecuniary general damages consume 70.5¢ of the claims settlement dollar. For claims above $75,000 non-pecuniary general damages account for 25.5¢ of the claims settlement dollar.

The impact on claims costs of prejudgment interest and *F.L.R.A./F.L.A.* claims is clear. The first Inquiry bodily injury claims survey shows the prejudgment interest and *F.L.R.A./F.L.A.* breakdown as follows:

Prejudgment Interest

(a) all claims surveyed (Fig. 7.7)	10.2%[10]
(b) claims between $1 & $10,000 (Fig. 7.8)	4.5%
(c) claims between $10,001 & $75,000 (Fig. 7.9)	12.0%
(d) claims over $75,000 (Fig. 7.10)	11.8%

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[9] The results of this second survey are considered in Chapter 10.

[10] This is a composite total which includes all those claims referred to in (b), (c) and (d).

Family Law Reform Act/Family Law Act

(a) all claims surveyed (Fig. 7.7)	5.4%
(b) claims between \$1 & \$10,000 (Fig. 7.8)	1.0%
(c) claims between \$10,001 & \$75,000 (Fig. 7.9)	5.1%
(d) claims over \$75,000 (Fig. 7.10)	8.6%

Party-and-party costs paid to counsel for the injured claimants account for 11.0% of the claims dollar. For smaller claims between \$1.00 and \$10,000, costs account for 11.3% of the settlement dollar. This rises to 12.6% for claims between \$10,000 and \$75,000 and declines to 8.8% for claims above \$75,000. When lawyers are involved in smaller claims, insurers will frequently pay up to 15% of the settlement in costs to the claimant's lawyer. An additional amount for disbursements is often paid as well. The 11.3% cost figure for claims between \$1.00 and \$10,000 is explained by the high percentage cost factor used, particularly in smaller claims, as modified by the relatively high number of smaller cases disposed of without a lawyer being involved. Involvement of lawyers per claim is higher for larger cases.[11] For cases over \$75,000, insurers do not routinely pay 15% in costs but that goes to explain why the party-and-party costs seem to be proportionately lower for claims above \$75,000 than for claims between \$10,000 and \$75,000.

Figures 7.7, 7.8, 7.9 and 7.10 do not refer to defence legal costs. The claims survey was intended to focus on compensation actually paid to injured persons, quite apart from the consideration of costs incurred by insurers in adjusting and defending claims. Those costs will be considered separately as part of transaction costs.[12]

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[11] For cases above \$25,000, all claimants had a lawyer.

The I.B.C. undertook its own claims study in February 1987.[13] The I.B.C. claims survey involved 1,144 claims. Of those claims, 391 were closed with a payment of more than $90,000. 753 claims were closed with a payment of between $25,000 and $90,000. The I.B.C. sampling did not take smaller losses (below $25,000) into account. Figures 7.11, 7.12 and 7.13 provide a breakdown of judgments and settlements according to the I.B.C. claims survey.[14] I do not know why the I.B.C. survey ignored claims below $25,000 and tended to emphasize claims over $90,000. The I.B.C. survey included defence legal costs. To permit a proper comparison with Inquiry claims data, those costs have been factored out. Overall, the data from the Inquiry survey and the I.B.C. survey are generally consistent. This is particularly true for the larger claims.

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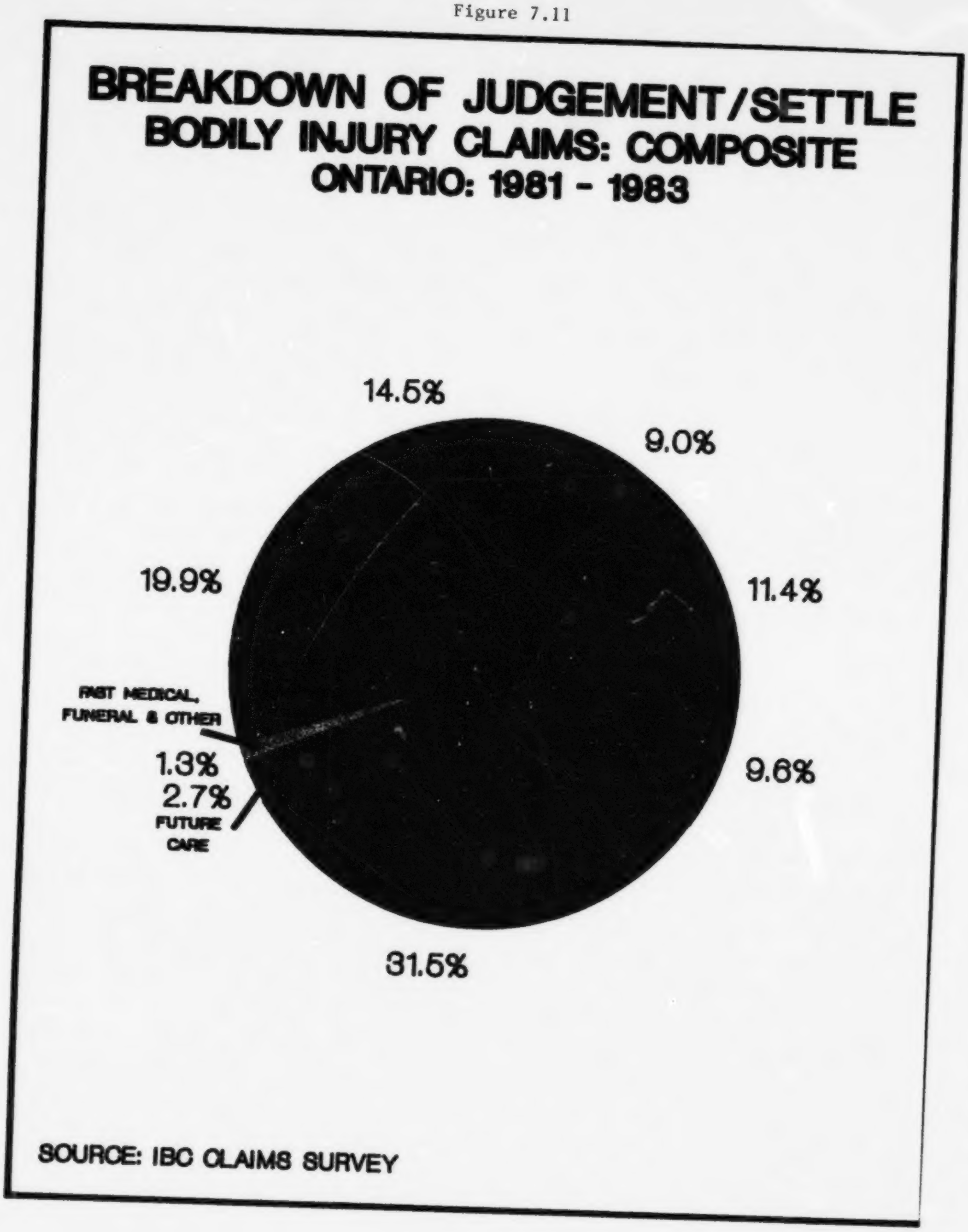
[12] Transaction costs refer to any expenditures undertaken to process a claim. They include party-and-party costs paid to claimants, defence legal costs, internal and external adjusting costs, the cost of other experts, and other claims-related expenses. See Inquiry Claims Survey, Appendix III.

[13] See I.B.C. claims survey (February 1987), Appendix XVII.

[14] The I.B.C. claims survey considered claims closed in 1985 and 1986. The accident dates extended through 1981 to 1983. A 40:60 waiting scheme was imposed, based on the 1983 fiscal policy year, size of bodily injury loss distribution (private passenger motor vehicles excluding farmers). This distribution shows that claims over $25,000 made up approximately 65% of bodily injury losses.

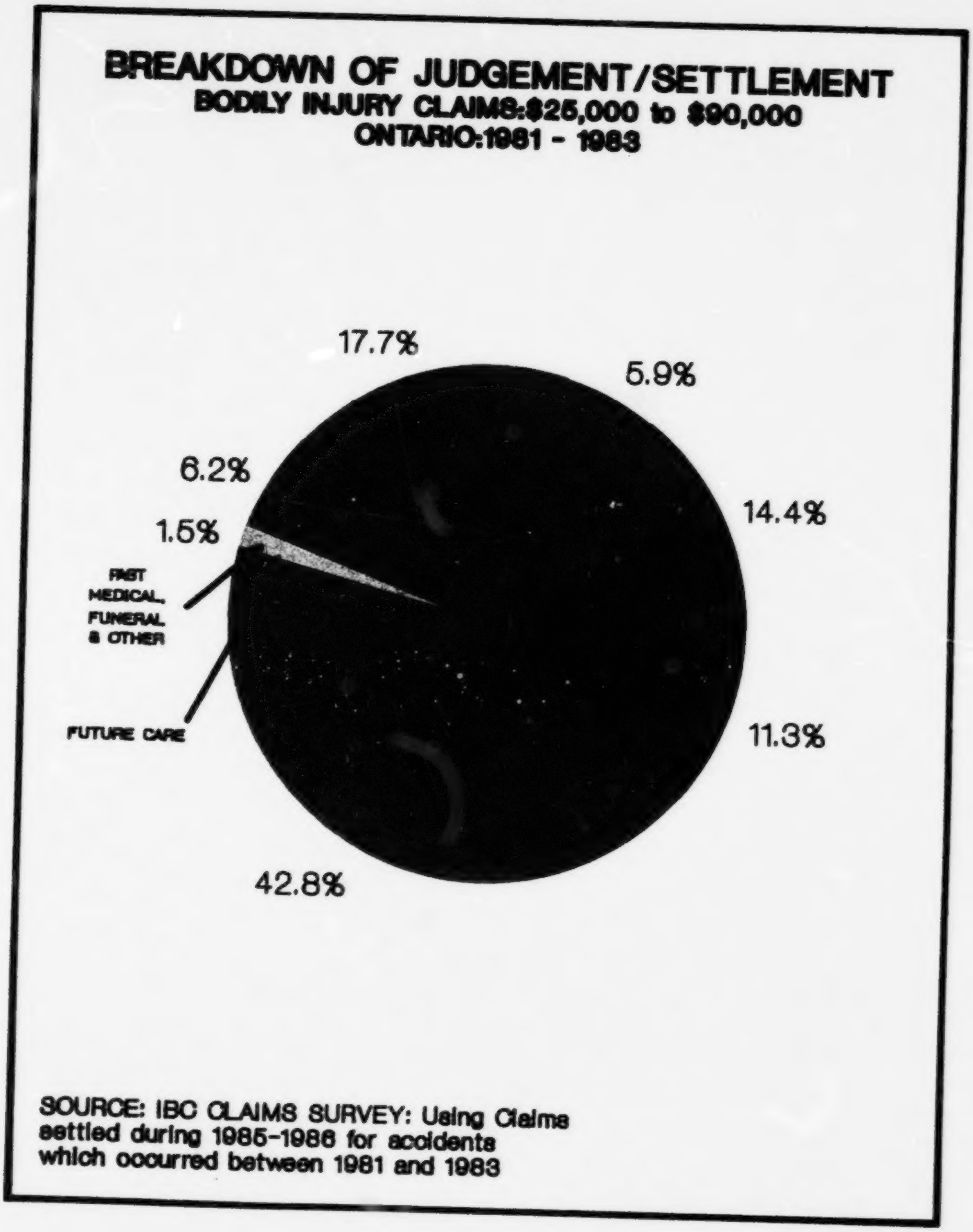
Figure 7.11



BREAKDOWN OF JUDGEMENT/SETTLE
BODILY INJURY CLAIMS: COMPOSITE
ONTARIO: 1981 - 1983

SOURCE: IBC CLAIMS SURVEY

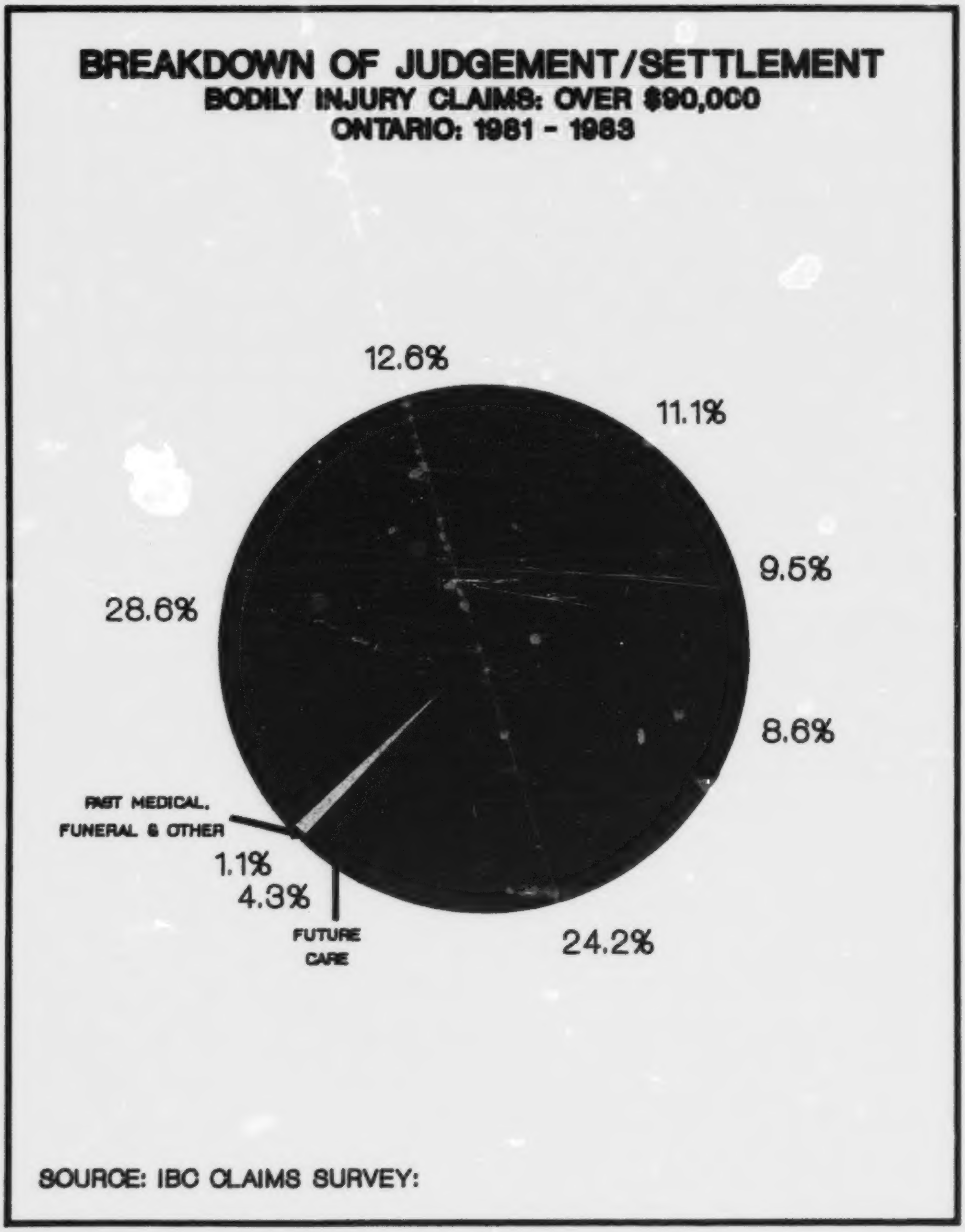
Figure 7.12



BREAKDOWN OF JUDGEMENT/SETTLEMENT
BODILY INJURY CLAIMS:$25,000 to $90,000
ONTARIO:1981 - 1983

SOURCE: IBC CLAIMS SURVEY: Using Claims settled during 1985-1986 for accidents which occurred between 1981 and 1983

Figure 7.13


BREAKDOWN OF JUDGEMENT/SETTLEMENT
BODILY INJURY CLAIMS: OVER $90,000
ONTARIO: 1981 - 1983
12.6%
11.1%
9.5%
8.6%
24.2%
28.6%
PAST MEDICAL, FUNERAL & OTHER
1.1%
4.3%
FUTURE CARE
SOURCE: IBC CLAIMS SURVEY:

I have not dealt with claims adjustment expenses, except for the brief reference made to defence legal costs. When insurers refer to claims costs or loss costs, the reference includes claims actually paid, claims adjustment expense paid, reserves established for unpaid but reported claims and reserves established for claims incurred but not reported (I.B.N.R. reserves). If a claim is paid, the claims cost will include claims adjustment expense; if a claim is pending, the file reserve established will include an estimate of claims adjustment expense. For now, I think it is reasonable to ignore transaction costs expended in resolution of third party bodily injury claims, subject to the observation that those costs have remained relatively stable. The increase in gross payout for bodily injury claims is not attributable to any significant increase in transaction costs, except possibly as related to defence legal costs.

Knowing what claims costs are, how they break down and that bodily injury costs have increased does not tell us why bodily injury claims costs have increased. Some have suggested that prejudgment interest and F.L.R.A./F.L.A. claims are the culprits.[15] Both prejudgment interest and F.L.R.A. claims have been with us since 1978. There is no doubt that the impact of prejudgment interest and the F.L.R.A. was not felt immediately. While F.L.R.A./F.L.A. claims and prejudgment interest have undoubtedly contributed to the steady increase in bodily injury claims costs, to isolate F.L.R.A./F.L.A. claims and prejudgment interest as the root cause of increased bodily injury claims costs is a mistake and results in other cost factors being ignored. If anything, recent decisions of the Ontario Court of Appeal have resulted in F.L.R.A./F.L.A. claims being reduced. There is no single factor which has dominated in driving bodily injury claims costs up. In my view, there are a number of explanations. They include:

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[15] For claims over $75,000, 25.2% of the dollars paid is attributable to prejudgment interest and F.L.R.A./F.L.A. claims. The cumulative total of prejudgment interest and F.L.R.A./F.L.A. claims is about the same for claims between $25,001 and $75,000, and all claims.

1. Economic loss increases in times of economic prosperity. Ontario has been economically prosperous since 1983-1984. More injured claimants have been employed and employed at higher wage rates. There are relatively fewer homemakers and more wage earners than was the case in the early 1980s. Accidents that once might have involved persons not in the labour force now involve injured persons with substantial claims for past and future loss of income. Economic prosperity has led to increased economic loss following a motor vehicle accident.

2. Economic prosperity leads to more driving, and some suggest, more driving at high risk times. As traffic density increases, accident frequency increases.

3. Since 1980, the discount rate has been established by statute at 2-1/2%. In 1978, a 7% discount rate was commonly used.[16]

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[16] This was the discount rate used in the Trilogy. The 2-1/2% discount rate has a significant effect in increasing damages in larger cases where funds have to be established at the time of settlement or trial to take care of future losses.

4. The Supreme Court of Canada's decisions in the Trilogy in 1978,[17] have forced trial judges and juries to break down damage assessments into reasonable constituent parts. This breakdown has resulted in a higher calculation of economic loss. Trial judges and juries can no longer rationalize their way to a decision by establishing an amount that sounds right. This has increased damages in many claims, particularly large claims.

5. Injured claimants have increasingly retained counsel to represent their interests. The Inquiry Claims Survey reveals that the use of counsel by injured claimants varies from region to region. On a province-wide basis, 57.6% of claimants were represented by counsel. In Toronto claims, 63.1% of claimants were represented by counsel. In cases above $25,000, all claimants were represented by counsel. Claimants' use of counsel is higher in urban areas and lower in rural areas.[18] On an aggregate basis it seems that the use of counsel has increased on a province-wide basis; that increase has led to a direct increase in claims costs. Once a claimant retains counsel, the insurer is required in almost all cases to pay an additional 10 to 15% to that counsel in party-and-party costs. That is a direct cost

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[17] The Trilogy consists of Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229; Arnold v. Teno, [1978] 2 S.C.R. 287; Thornton v. Prince George School District, [1978] 2 S.C.R. 267.

[18] See Appendix III.

increase. There are ripple effects as well. Counsel will almost invariably secure payment of prejudgment interest, which might not otherwise be paid. Further, the involvement of counsel, on balance, will result in an increase in the settlement value of the claim. There is no doubt that for similar injuries, claimants represented by counsel secure more compensation than those claimants that are not represented by counsel.

6. One of the indirect consequences of the Trilogy was the development of expertise among lawyers in establishing economic loss. Although I have no data to support this conclusion, it seems to me that lawyers are increasingly inventive in their development of evidence to establish economic loss. This inventiveness leads to increased economic loss damage assessments.

7. In my view, doctors, economists, actuaries and other experts are more capable of giving evidence in a manner that is convincing to trial courts. This, of course, cuts both ways as experts appear for both plaintiffs and defendants, but on balance results in an increase in damages. When trial damages increase, settlements tend to increase. Experts have become more proficient in preparing reports required for personal injury litigation. Those reports have an impact in establishing damages for trial or settlement purposes. As well, expert reports are expensive and in the final analysis are usually paid for by the defendant's insurer as part of party-and-party costs.

8. Gross-up is now a fact of life in larger claims. The Inquiry Claims Survey showed gross-up at 0.4% of

claims costs, but this is misleading. There was not a sufficient number of large cases in which gross-up was a factor to permit a realistic consideration of the actual impact of the gross-up on damage and settlement assessments. Moreover, because of gross-up, among other things, larger cases involving significant future care costs are often resolved by the use of structured settlements. In those cases where future care costs are significant, or in major fatal accident cases, gross-up significantly increases claims costs.

9. Health care advances have resulted in badly injured persons surviving at great expense over a significant, albeit reduced, life expectancy. In such cases, future care costs can be enormous. Health care advances in areas such as prosthetic devices have resulted in significant cost increases.[19]

10. In my opinion, pre-trials have resulted in higher costs in claims which have gone to pre-trial and in cases which are indirectly influenced by the results of pre-trials in other cases. Every litigated motor vehicle negligence case is pre-tried if it is not resolved by settlement at an earlier stage. Although most cases are resolved by settlement before a pre-trial, I think the pre-trial process generally works to increase the value of claims. Through the mechanics of a pre-trial, areas of deficiency in the plaintiff's case are often identified and, I assume, corrected. Subsequent assessments of damages tend to

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[19] Gianonne v. Weinberg, unreported decision of Fitzpatrick J., Ont. H.C., May 22, 1986.

be based upon that information. It used to be thought that juries established reasonable bases for the judicial assessment of non-pecuniary general damages. I have never subscribed to that view. It was then thought that judges, through their judgments in cases which were not settled, established what should be paid in typical injury cases. There was a certain legitimacy to that contention given the propensity of judges and lawyers to seek guidance from decided cases. I am convinced that the pre-trial now establishes the going rate, particularly for non-pecuniary loss, because pre-trial judges are made aware of what is being offered and paid for non-economic loss in the real world. Subsequent assessments of damages are influenced by that process.

11. There is no doubt that F.L.R.A./F.L.A. claims have increased damages. The increase has been substantial; however, as F.L.R.A. claims have existed since 1978, I do not think recent increases in bodily injury claims costs can be attributed to the F.L.R.A. or the F.L.A.

12. Prejudgment interest is a real cost to the compensation system. Prejudgment interest has been a part of the system since late 1977 and its impact is significant. The settlement of serious bodily injury claims is often delayed. The high interest rates of the early 1980s undoubtedly increased claims costs even if on settlement or at trial interest rates were averaged. It is unusual to find a case in which the claimant is represented by a lawyer where prejudgment interest is not paid.

13. Judicial generosity is another issue to be considered. I confess to a bias on this issue. Judges (and to a lesser extent juries) are often criticized for unreasonably high awards. I do not think that the assessment of non-pecuniary loss has dramatically increased. In catastrophic cases, non-pecuniary losses are capped at approximately $200,000 (1987 dollars). Although non-pecuniary damage assessments have increased in smaller cases, when inflation is considered, the increase has not been substantial. For example, in 1960, a soft tissue, non-serious neck injury (the so-called whiplash injury) was worth approximately $1,500 for non-pecuniary general damages. The value of that kind of injury gradually increased, first to approximately $3,000, and then to $5,000. I am told that such an injury is now worth between $6,000 and $8,000. That appears to be a dramatic increase in value for a less than dramatic injury; however, if a 1960 $1,500 injury is adjusted to inflation, it should be assessed at $6,250 in 1987. An analysis of Inquiry Claims Survey data reinforces the conclusion referred to above. Those data suggest that the weighted average (cars, trucks and motorcycles) of the non-pecuniary general damages paid for soft tissue neck injuries is $7,558.46. In contrast to products liability and occupiers' liability cases, insurers have not suggested that judges have expanded the perimeters of negligence in motor vehicle accident litigation. Judicial generosity is overplayed by insurers. The Court of Appeal has consistently reduced inordinately high damage assessments; there is, however, no doubt that economic loss has increased and the judicial treatment of it has been more generous particularly in the case

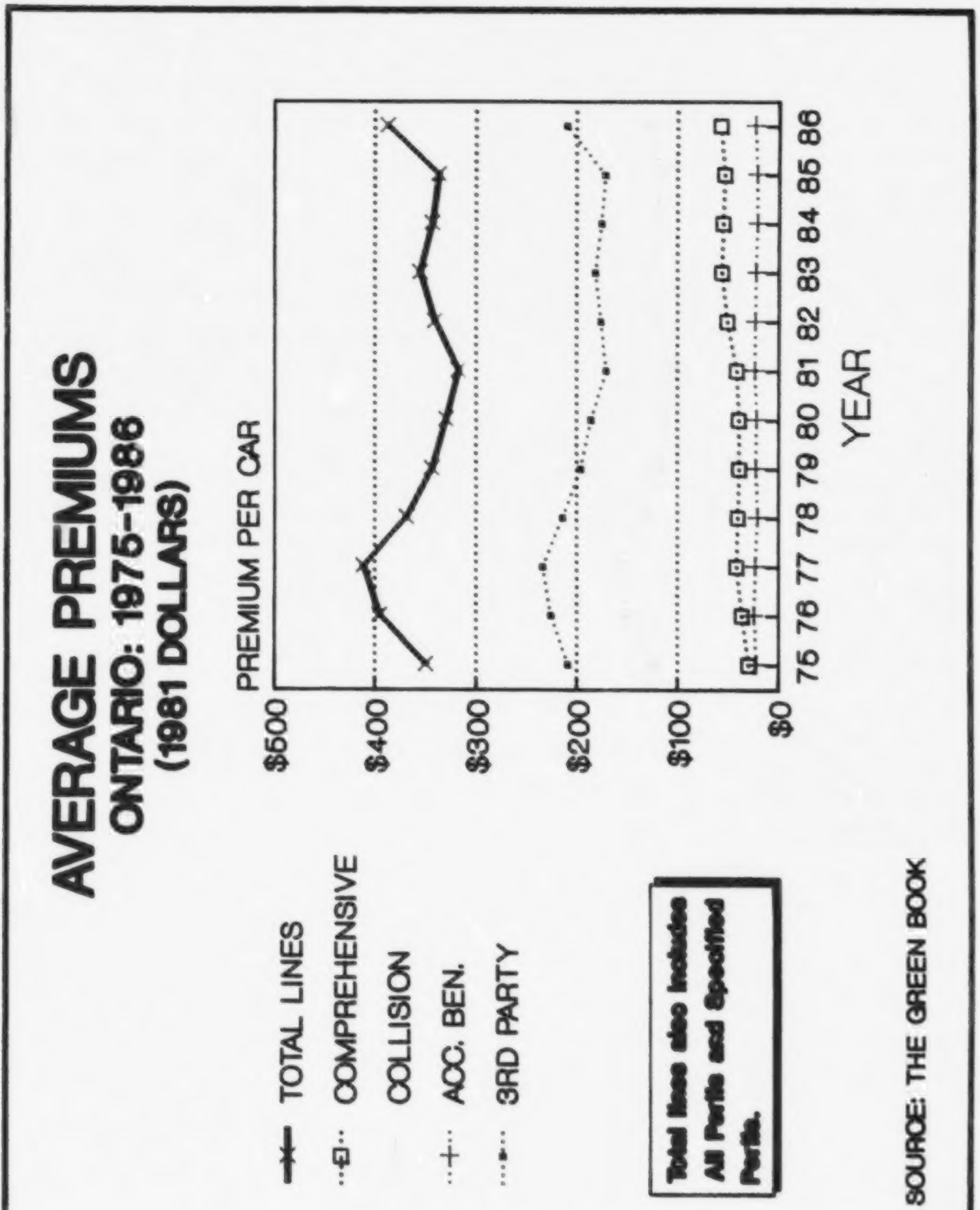
of future care costs. This has increased bodily injury costs. In my view, that is the way it should be. The catalyst for a more humane response to future care costs was provided by the Supreme Court of Canada's judgment in Andrews. Finally, apart from the Court of Appeal's influence, it seems to me that in the last few years trial judges and juries have become more moderate in their treatment of non-pecuniary compensation. This is particularly visible in Family Law Act claims. Many insurers have acknowledged this trend.

B. PREMIUMS

It is useful to consider past premium trends for all coverages in two general respects. First, quite apart from loss costs, increases and decreases in automobile insurance premiums should be viewed over a reasonable period of time and measured in constant dollars. Second, the historic relationship between loss costs and premiums has to be taken into account to the extent that insurers have regard to past loss cost experience in predicting future loss costs. I, therefore, propose to examine the trends for premiums and loss costs for Sections A, B and C of the automobile policy and on a composite basis for the period 1975 to 1986.

Figure 7.14 sets out the premium trends for Sections A, B and C (collision and comprehensive only) of the automobile policy. Figure 7.14 also presents a composite

Figure 7.14



SOURCE: THE GREEN BOOK

premium line as indicated.[20] All premiums are measured in constant (1981) dollars. These general conclusions are evident:

(a) Although third party liability/property damage (Section A) premiums increased substantially in 1985 and 1986, the 1986 level was still less than the premium level in 1977. It should be noted that there was a steady and relatively substantial premium decrease from 1977 when premiums were at their highest, to 1981. Section A premiums remained relatively stable between 1981 and 1985 when, as indicated, third party premiums were substantially increased.

(b) The accident benefit (Section B) premium line has been relatively unstable but the variations from year to year have not been as dramatic as for Section A premiums. In constant dollars accident benefit premiums in 1986 were marginally lower than accident benefit premiums in 1976 and about the same as accident benefit premiums in 1981.

(c) Section C collision premiums in 1986 were substantially lower than their high point in 1977 and about the same as they were in 1983.

(d) Section C comprehensive premiums have increased substantially since 1975 although the increase from the previous high point in 1982 is relatively small.

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[20] The composite line includes all and specified perils which are part of Section C coverage.

(e) The composite (all coverages) premium picture, perhaps not surprisingly, follows the same general path as the Section A premium. Even after the substantial 1985/86 increase, composite premiums were still less than premiums in 1977 when measured in constant (1981) dollars.

C. PREMIUMS AND LOSS COSTS

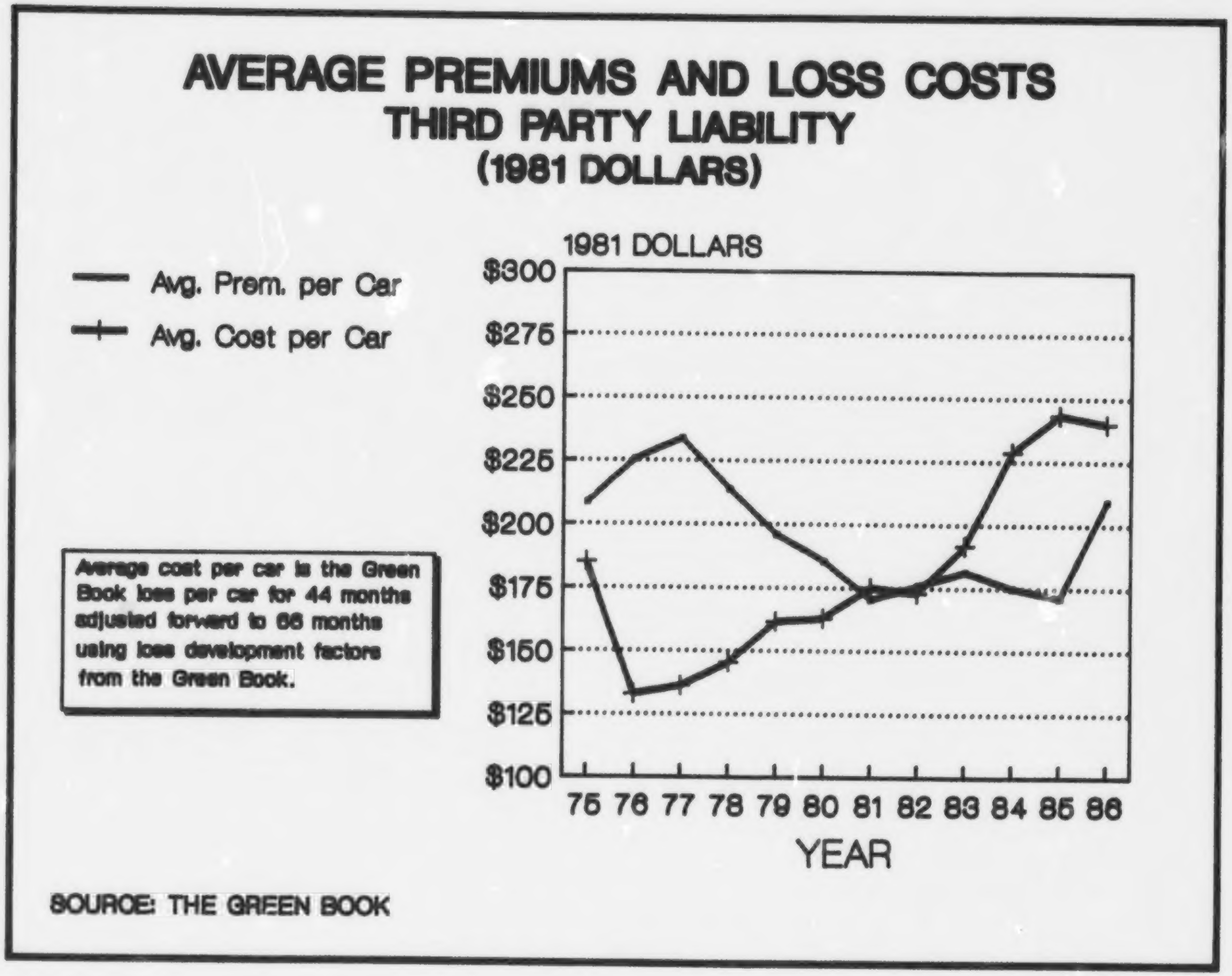
Having separately considered loss costs and premiums I now turn to consider their relationship over the same period 1975-86. At any given time the relationship between loss costs (using undiscounted reserves) and premiums is what insurers refer to as the loss ratio (or in current insurance parlance, the claims ratio). The introduction of operating expenses, as will be dealt with later, converts the loss ratio into what insurers refer to as the combined ratio.

From the outset it seemed to me that there was no useful purpose to be served in examining the loss ratio or combined ratio of any individual insurer. Neither the loss ratio nor the combined ratio takes into account the investment side of the business (unless discounted reserves are used). The relationship between costs and premiums is, in my view, useful only for the purpose of establishing whether there is an appropriate relationship between premiums and actual loss costs. This provides some evidence upon which premiums must be fixed in the future. Both ratios will be affected by increases/decreases in premiums and relevant expenses. Thus, neither can be viewed as a measure of efficiency. Since investment income is excluded from both calculations, neither the loss ratio nor the combined ratio is a measure of profitability at any given time. In short, both ratios should be looked at with caution.

Figure 7.15 sets out bodily injury/property damage premium and loss cost lines per car insured from 1975 to 1986, adjusted to 1981 dollars. As indicated, when measured in constant (1981) dollars, premiums declined steadily from 1978 to 1981. The 1977 third party cost premium gap would suggest that premiums were reduced starting in 1978, because the industry thought premiums were too high and could safely be lowered. The red "cost" line moved steadily higher from 1982 to its high point in 1985. When the 1982 cost increase started, the green premium line was above the red cost line. In 1984, bodily injury/property damage costs moved quickly beyond bodily injury/property damage premiums. The gap was at its widest in 1985 when premiums were significantly increased (see Figure 7.15). The 1986 premium increase was parallel to the cost increase which started in 1982 and 1983. Bodily injury/property damage costs decreased somewhat in 1986 and continued to decrease very slightly in 1987. As indicated earlier, cost increases in third party liability (Section A) are largely attributable to a small but real increase in average bodily injury claims frequency, and until 1986, the steady increase in average bodily injury claims costs.

The bodily injury/property damage cost/premium gap was at its widest in 1977 when premiums significantly exceeded costs, and in 1985 when loss costs significantly exceeded premiums. Relative stability of premiums from 1981 to 1985 resulted in the one-shot dramatic premium increase in 1986 becoming a consumer/political problem.

Figure 7.15



AVERAGE PREMIUMS AND LOSS COSTS
THIRD PARTY LIABILITY
(1981 DOLLARS)

Average cost per car is the Green Book loss per car for 44 months adjusted forward to 66 months using loss development factors from the Green Book.

SOURCE: THE GREEN BOOK

Actuaries and accountants (and in some jurisdictions, taxing authorities) have long recognized that any realistic assessment of an insurer or the insurance industry must consider the insurer's investment income. This is best done by discounting reserves so as to take the time value of money into account. Some insurers have resisted taking this into account, not because it is wrong, but because the insurer's reserving track record has often erred on the low side. Discounting reserves, so the thinking goes, would compound the problem.

More and more insurers are now using standard actuarial techniques to establish reserves for unpaid claims. The time value of money is taken into account, and in my view, must be taken into account, by making a present value calculation to establish appropriate file and I.B.N.R. reserves. If reserves are not discounted, there will be an inevitable mismatch between income and outgo. The Ontario Task Force on Insurance Report refers to the difference between discounted and undiscounted reserves as a "hidden equity".[21]

The present value of a claim reserve depends on:

(a) the amount payable as estimated by the insurer;
(b) the timing of the claim payment, again as estimated by the insurer; and
(c) the interest the insurer can earn while holding the reserved funds.

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[21] Ontario Task Force on Insurance, Final Report (1986), Appendix 8, p. 245.

In practice it is necessary, but difficult, to determine (a) and (b) above on an individual claim basis. When an insurer has several hundred claims, it is possible to establish an aggregate amount required to pay outstanding claims and to establish a general pattern in the timing of claims payments.

For example, at the end of 1988, insurer ABC may estimate that it will require $7-million to pay its incurred claims. Company ABC may be able to establish that on an aggregate, as opposed to a per claim basis, the payment pattern for those claims will be:

a) $3-million in 1989;
b) $2-million in 1990;
c) $1-million in 1991; and
d) $1-million in 1992.

Assuming company ABC can earn 8% net on invested funds, the present value of the $7-million future liability is approximately as follows:

YEAR OF PAYMENT	AMOUNT PAYABLE	PRESENT VALUE AT DECEMBER 31, 1988 AT 8% PER ANNUM
1989	$3,000,000	$2,887.000
1990	2,000.000	$1,782,000
1991	1,000,000	825,000
1992	1,000,000	764,000
	$7,000,000	$6,258,000

As can be seen from the above chart, the impact of discounting reserves is obvious and significant.

The I.B.C. discounted reserves in the actuarial data accompanying its submission to this Inquiry. The I.B.C. and its actuary are to be commended for taking that step.

Figure 7.16[22] sets out the same bodily injury/property damage cost/premium picture as Figure 7.15 but with the cost line adjusted to accommodate discounted reserves. As can be seen, discounting reserves lowers the cost line. Assuming reserves are reasonable when considered on an aggregate basis, the cost premium comparison is more realistic when reserves are discounted.

The insurers' explanation that a substantial premium increase in 1986 was required to bring premiums into line with increasing bodily injury loss costs requires some examination. At the outset, even using discounted reserves, I note that it was in fact necessary to increase premiums in 1986. The root cause of the problem occurred much earlier. Premiums were declining from 1977 to their low point in 1981. Loss costs, as indicated, increased moderately in the same period. Loss costs increased steadily and relatively substantially from 1982 through 1985. In this period, third party liability premiums remained stable. There is likely no single explanation for the steady decline in third party premiums between 1977 and 1981. One plausible explanation is that third party premiums were too high in relation to expected loss costs at that time. Another explanation is that high interest rates of the late 1970s and early 1980s Figure

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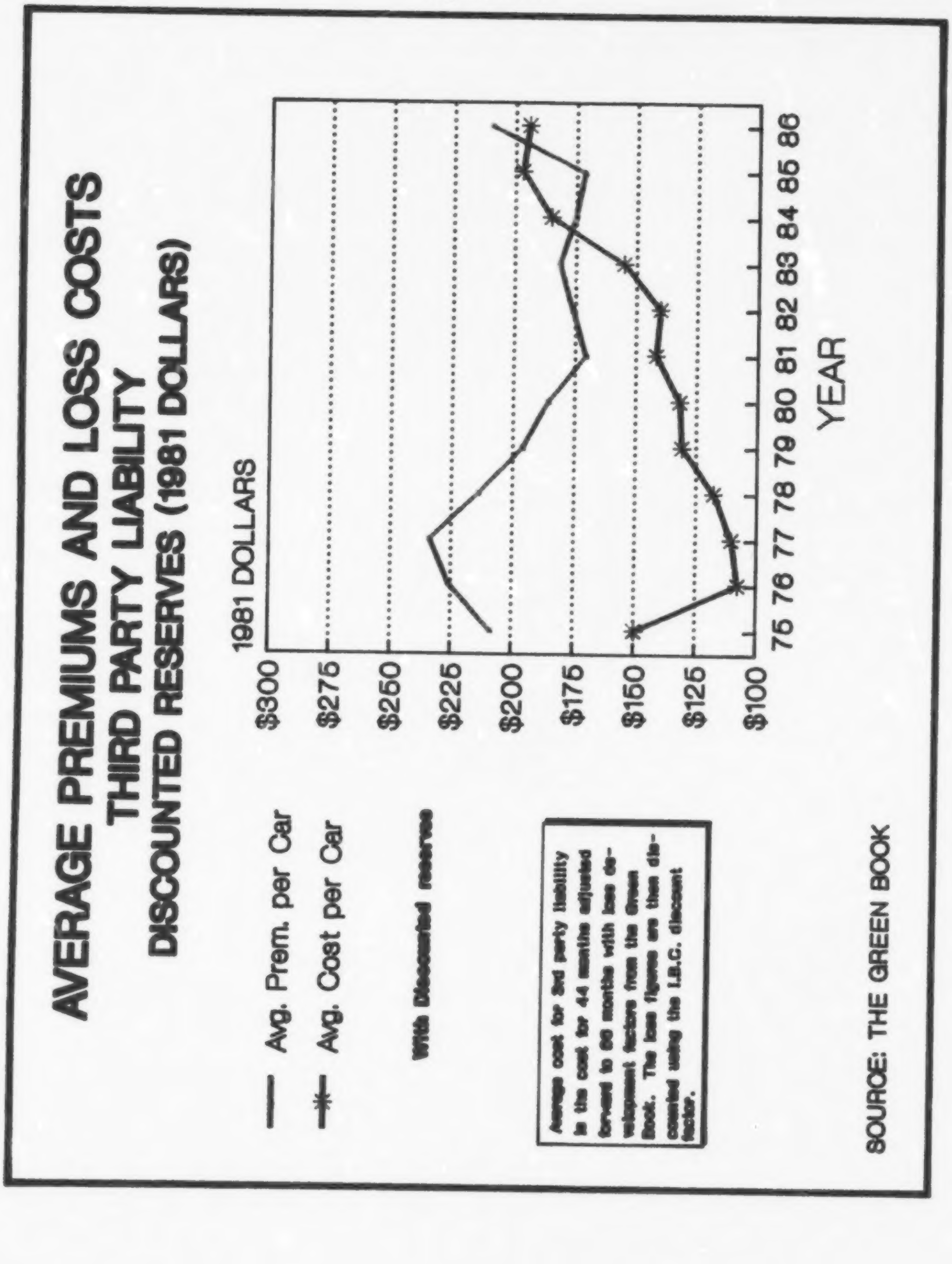
[22] The third party liability (bodily injury/property damage) discount figure used was the same factor as used by the I.B.C.'s actuary in the I.B.C. submission to this Inquiry.

Figure 7.16



AVERAGE PREMIUMS AND LOSS COSTS
THIRD PARTY LIABILITY
DISCOUNTED RESERVES (1981 DOLLARS)

With Discounted reserves

Average cost for 3rd party liability is the cost for 44 months adjusted forward to 60 months with loss development factors from the Green Book. The loss figures are then discounted using the I.B.C. discount factor.

SOURCE: THE GREEN BOOK

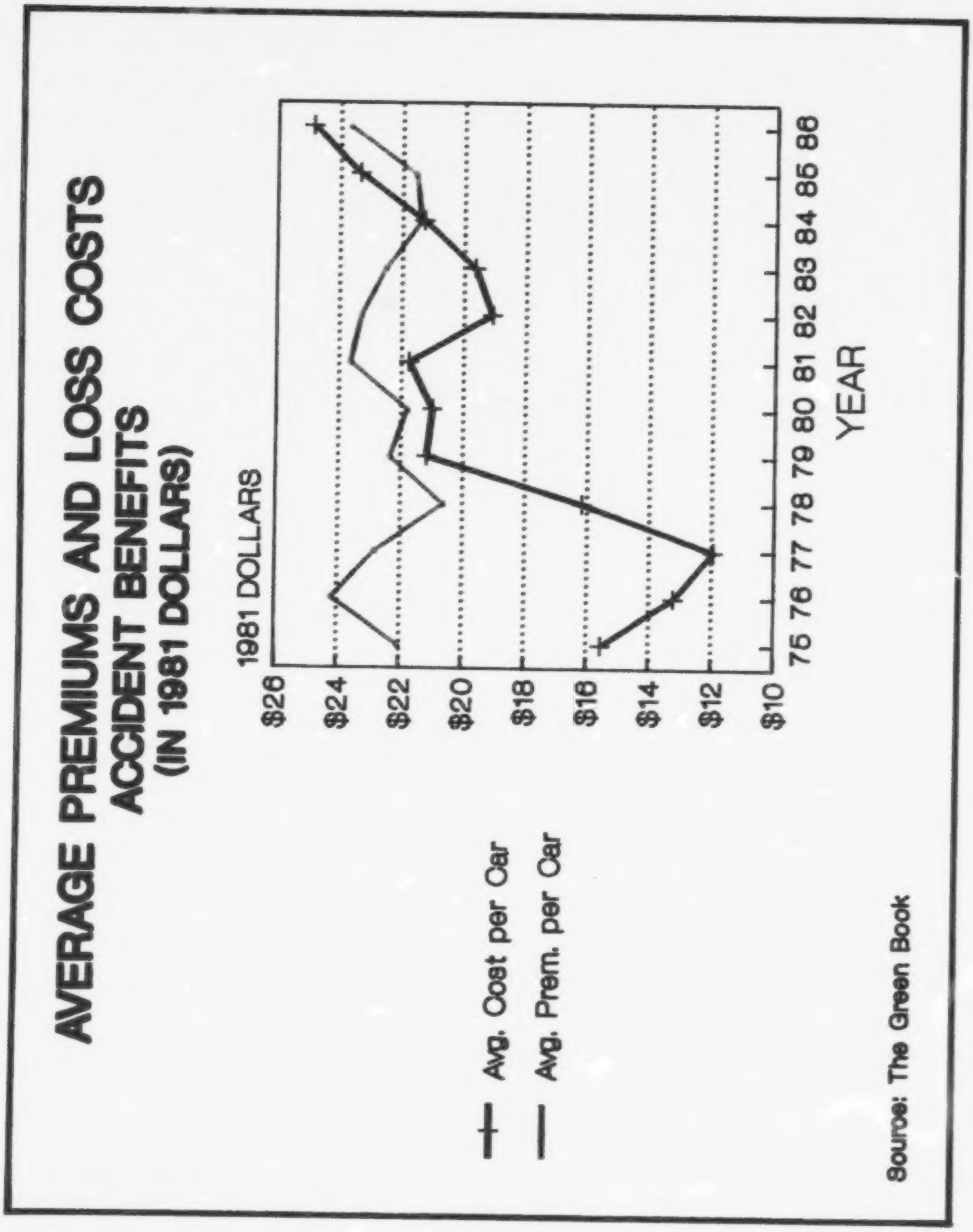
encouraged insurers to be less vigilant in their concerns about expected loss costs than might otherwise be the case. This is the cash flow underwriting syndrome.

By 1982-83 two compounding problems became visible, at least with the benefit of hindsight. First, interest rates began to decline; second, bodily injury claims costs increased, at least in part due to the somewhat late blooming effect of the 1977-78 legislation which introduced prejudgment interest and expanded access to non-pecuniary compensation through the F.L.R.A. Generally, the insurance industry took no real account at any time, and particularly in the early 1980s, of the probable impact of prejudgment interest and F.L.R.A. claims. Even now, insurers do not for the most part capture data as to what is being paid to bodily injury claimants for prejudgment interest or under the F.L.A. Insurers did not take reasonable account of the probability that claims costs would necessarily increase once the recession of the early 1980s ended and relative prosperity returned. The industry collectively responded with a substantial premium increase in 1985-86. If the increase had been introduced gradually, there would have been fewer and less intense complaints.

Figure 7.17 presents the accident benefits (Section B) picture from 1975 through 1986. These conclusions are evident:

(a) Accident benefits premiums per car were significantly higher than accident benefit costs per car until 1978-1979. The greatest cost/premium gap existed in 1976 and 1977.

Figure 7.17



AVERAGE PREMIUMS AND LOSS COSTS
ACCIDENT BENEFITS
(IN 1981 DOLLARS)

Source: The Green Book

(b) The 1978 cost increase was attributable to the increase in accident benefits (particularly the increase in the disability benefit from \$70 to \$140) in 1978. Premiums were not adjusted at that time, probably because pre-1978 premiums greatly exceeded accident benefit costs.

(c) Accident benefit costs remained level from 1979 through 1981, and the decline in 1982 was probably attributable to the recession.

(d) Accident benefit costs have steadily increased since 1982. That increase is a source of concern.

(e) Accident benefit premiums declined from 1976 to 1978. Premiums increased in a ragged fashion from 1978 through 1981, and then slowly declined until 1984, when the declining premium line and the inclining cost line intersected.

(f) From 1984, accident benefit premiums tracked costs, but premiums from 1984 to 1986 fell slightly below accident benefit costs when reserves are not discounted.

Figure 7.18 mirrors Figure 7.17 except that the cost line has been adjusted to accommodate discounted accident benefit reserves.[23] When reserves are discounted, accident benefit loss costs per car are lowered; the result is that premiums have consistently remained above

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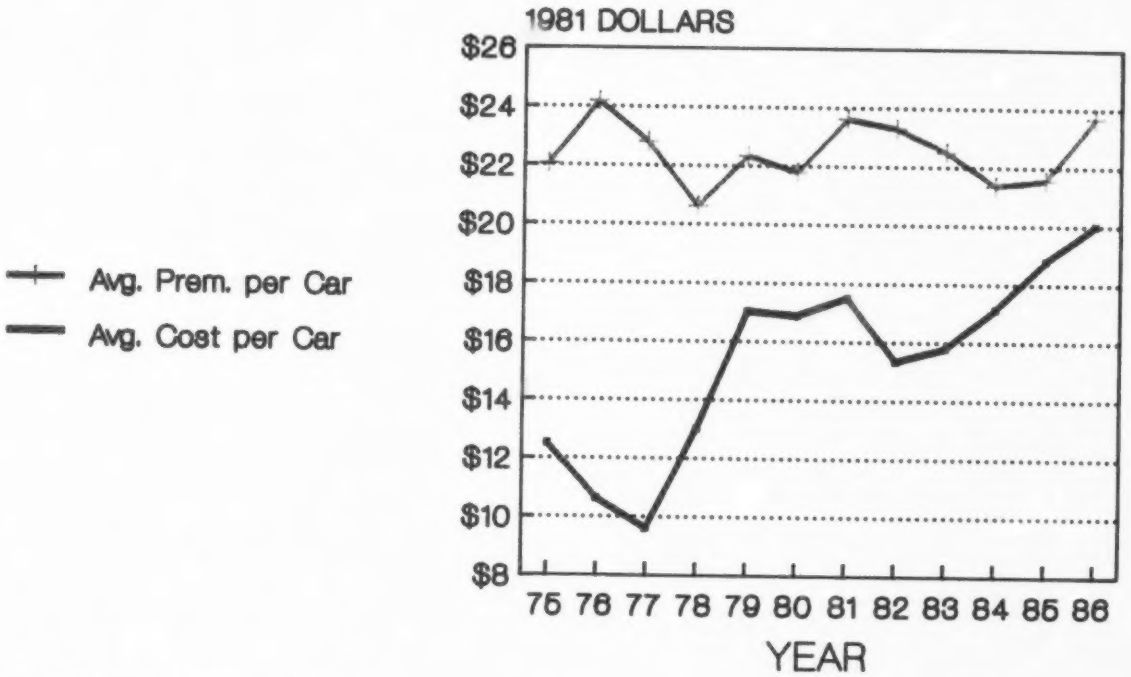
[23] The discount factor used for accident benefits was the same factor used by the I.B.C.'s actuary in the I.B.C. submission to this Inquiry.

Figure 7.18

AVERAGE PREMIUMS AND LOSS COSTS
ACCIDENT BENEFITS: DISCOUNTED RESERVES
(IN 1981 DOLLARS)



SOURCE: THE GREEN BOOK

costs. This does not occur when undiscounted reserves are used (Figure 7.17). In the end result, accident benefit premiums seem to be adequate.

Figures 7.19 and 7.20 show average premium and loss costs per car for collision and comprehensive coverage respectively. Collision seems to be a relatively profitable and stable coverage. At no time since 1973 have collision costs exceeded collision premiums. Because collision losses are paid quickly, reserves have not been discounted.

Figure 7.20 shows a relatively stable comprehensive cost line. Comprehensive coverage is not the source of the cost/premium problem although comprehensive costs and premiums have steadily increased. This coverage is profitable.

Finally, Figure 7.21 shows the composite premium cost picture, taking into account all coverage (with undiscounted reserves). It was only in 1985 that the aggregate costs on an industry basis rose above premiums. Figure 7.22 shows the same composite picture but with discounted reserves. Different discounting factors have been used for bodily injury accident benefits and collision/comprehensive coverages.[24]

With discounted reserves, the average bodily injury/property damage cost per car increased from

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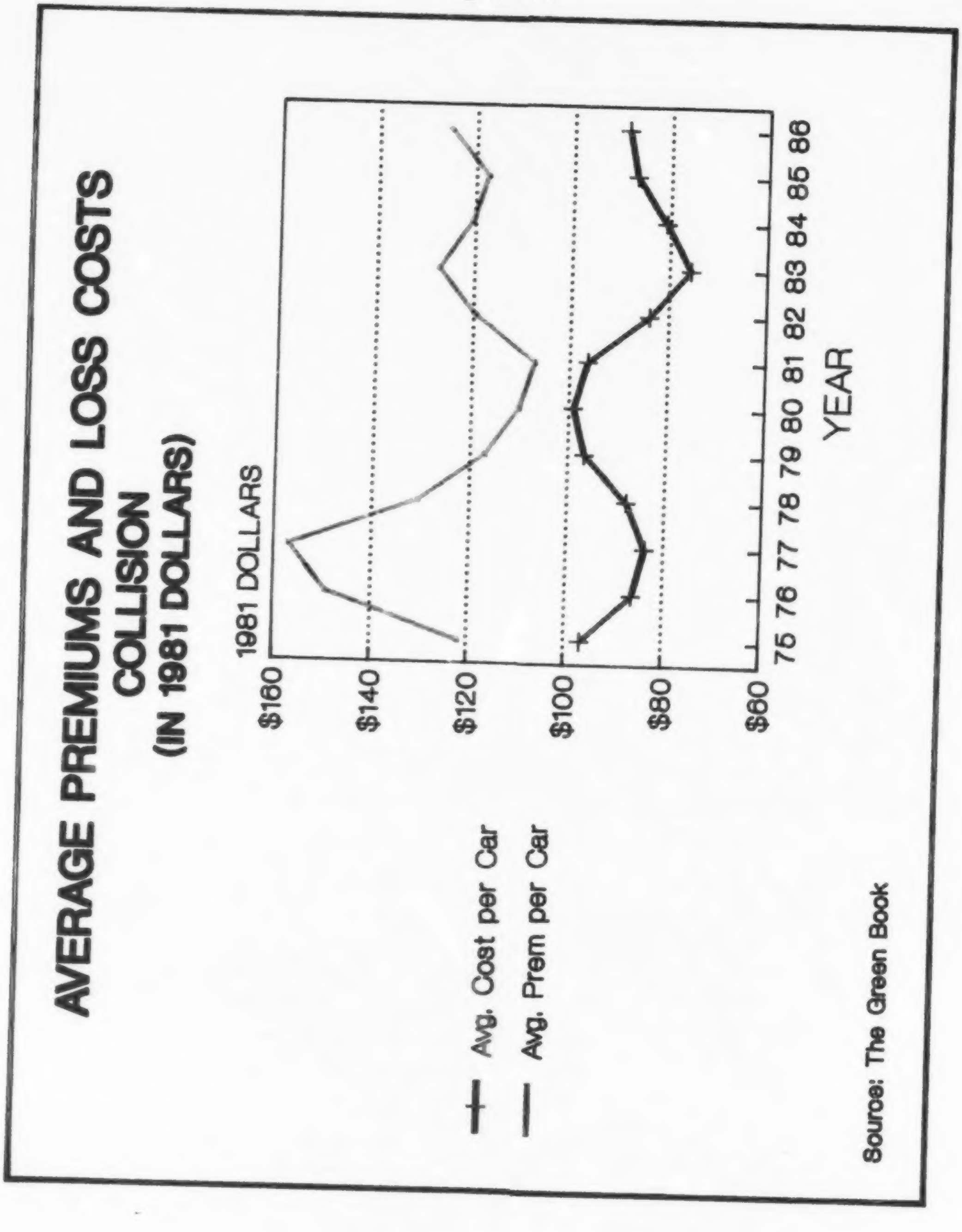
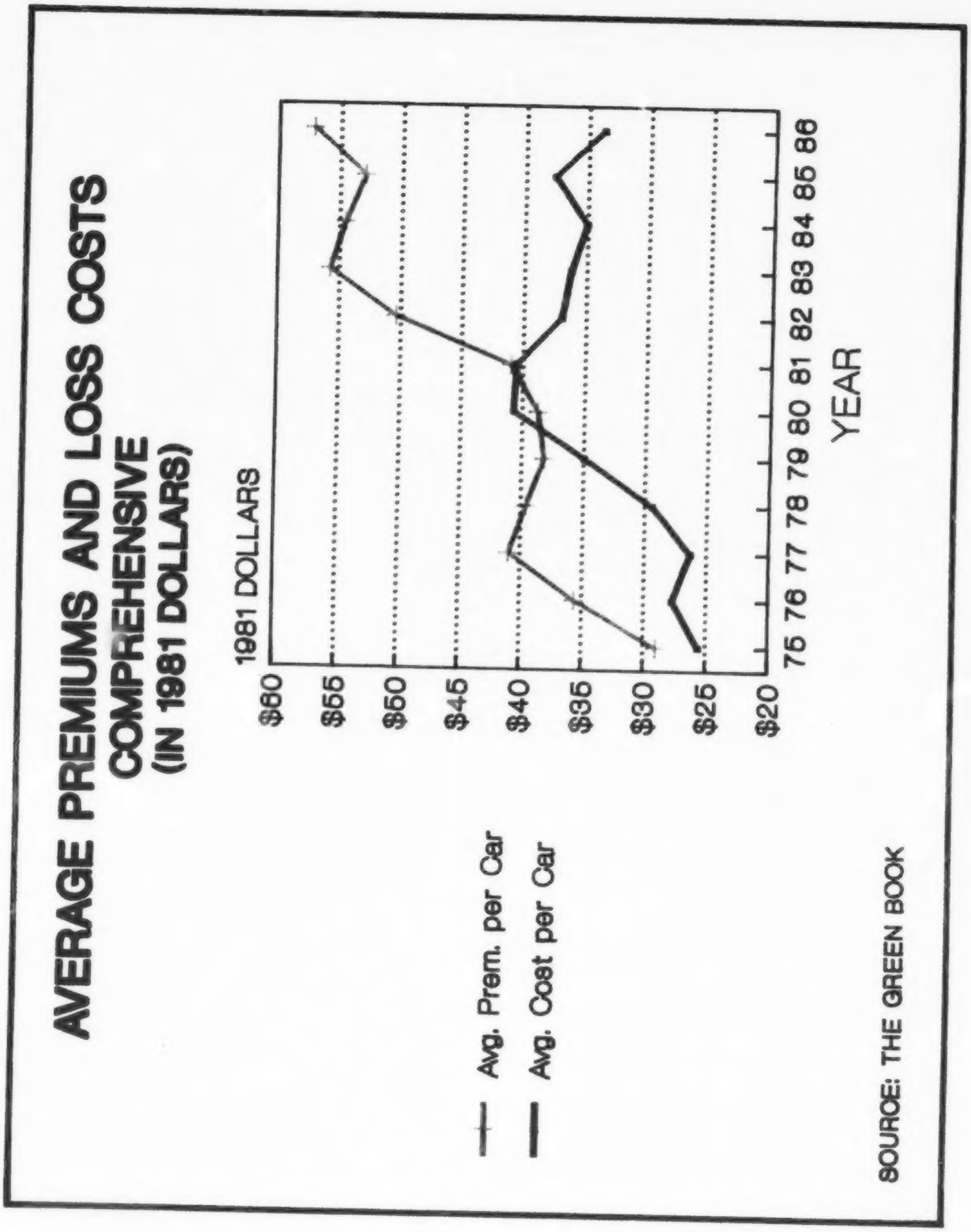
[24] Once again, the discount rates used are the same discount rates chosen by the I.B.C.'s actuary who discounted reserves for the purpose of costing the I.B.C.'s threshold no fault proposal.

Figure 7.19



Source: The Green Book

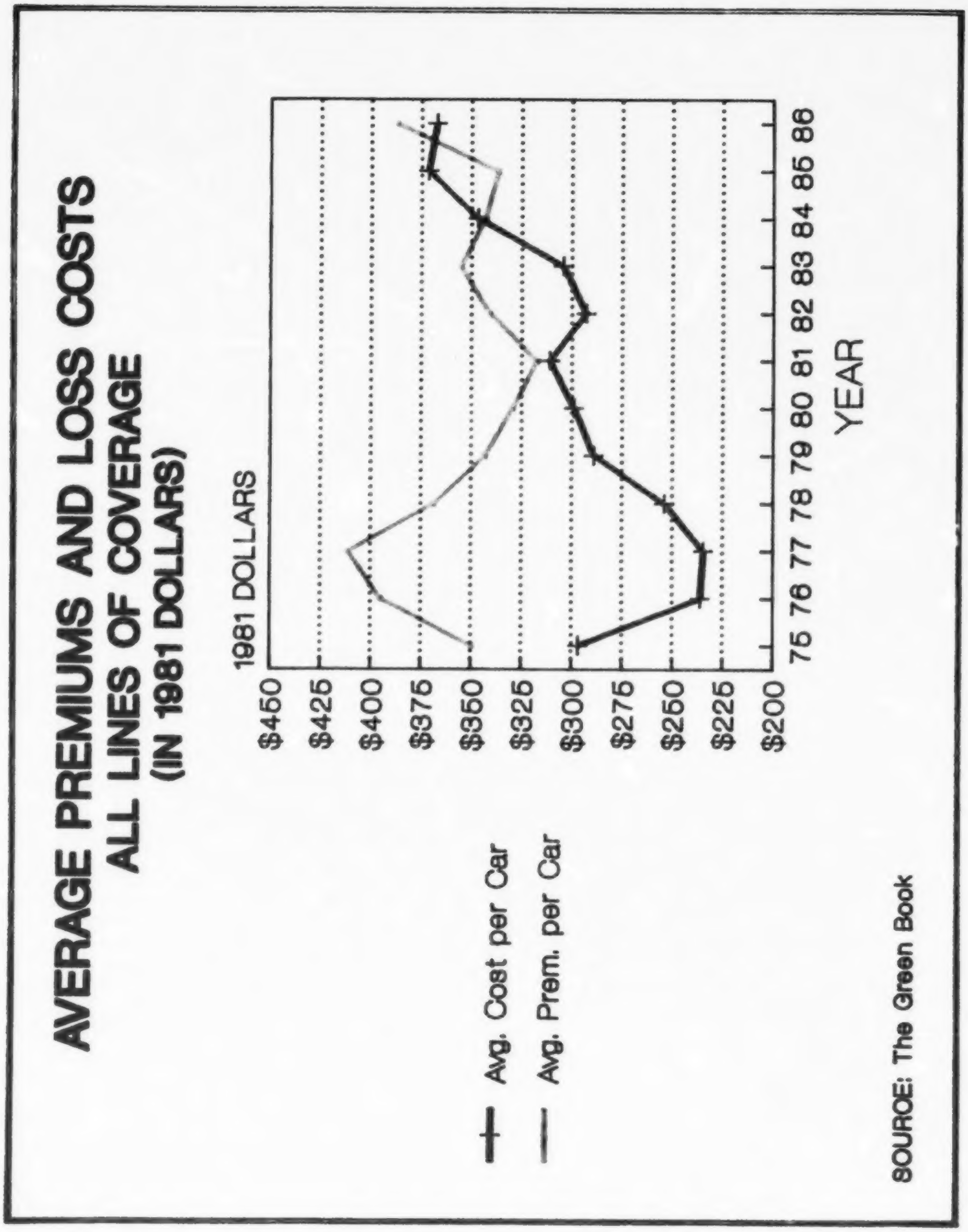
Figure 7.20



AVERAGE PREMIUMS AND LOSS COSTS
COMPREHENSIVE
(IN 1981 DOLLARS)

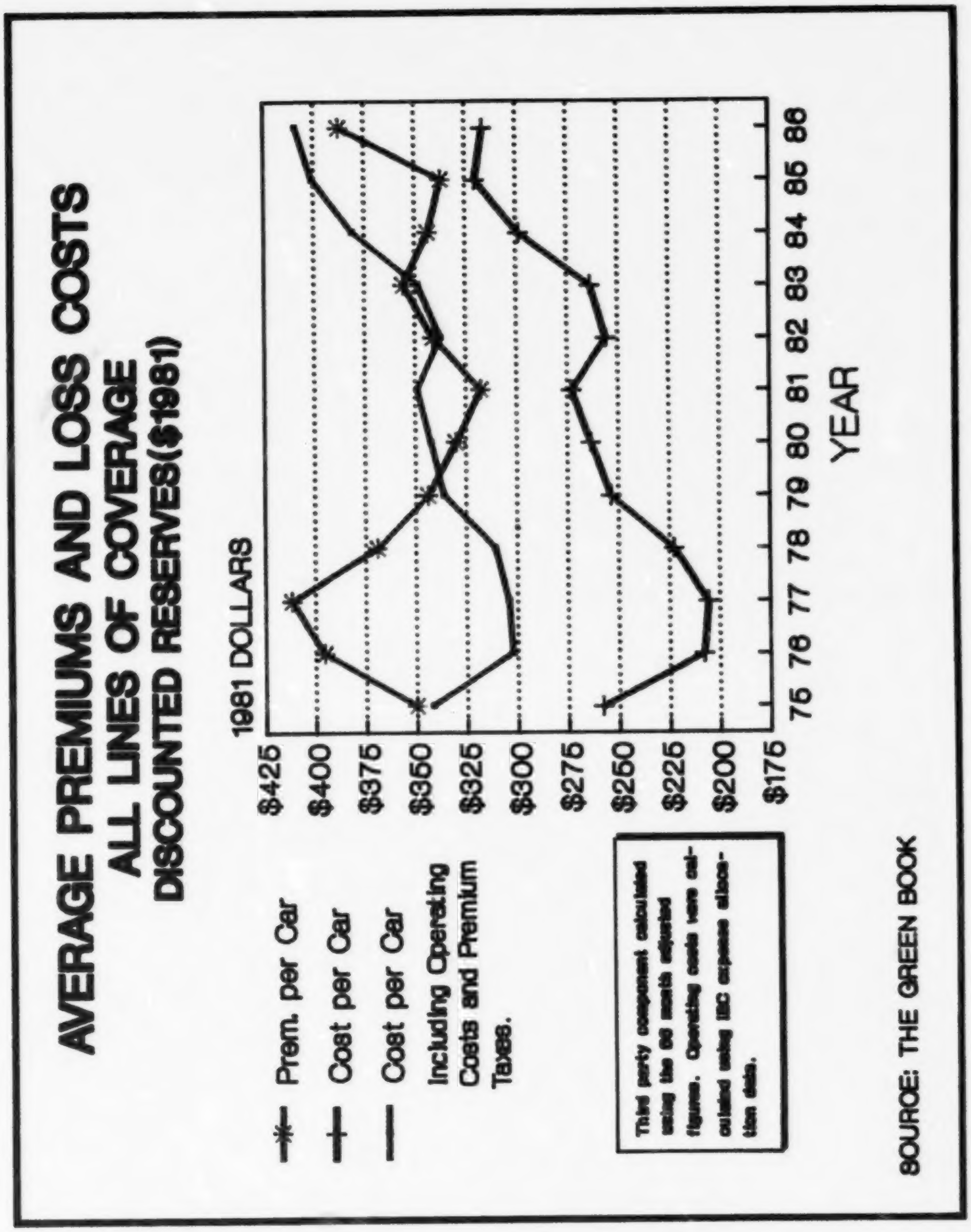
SOURCE: THE GREEN BOOK

Figure 7.21



SOURCE: The Green Book

Figure 7.22



AVERAGE PREMIUMS AND LOSS COSTS
ALL LINES OF COVERAGE
DISCOUNTED RESERVES($1981)

Third party component calculated using the 60 month adjusted figures. Operating costs were calculated using IBC expense allocation data.

SOURCE: THE GREEN BOOK

approximately $250 in 1975 to $300 in 1986.[25] With undiscounted reserves the average bodily injury/property damage cost per car increased from $280 in 1975 to $350 in 1986.

Although it is useful to consider the historic relationship between loss costs and premiums, from the standpoint of separate coverage, and as related to all coverage lines (as per Figures 7.21 and 7.22), it must be emphasized that the previously referred to cost and premium figures do not take operating expenses into account. Insurers' operating expenses cannot be ignored in any real world assessment of where we have been, where we are and where we are going from a loss cost/premium standpoint. Claims adjustment expense is included in loss cost figures, but operating expense is not.[26] Accordingly, a third line (pink) appears on Figure 7.22. The third line manifests the impact of operating expense on the average cost per car. By introducing an operating expense factor, the lower red cost line on Figure 7.22 is moved upward; the new cost line becomes the heavy pink line shown in the middle part of Figure 7.22. Although operating expenses will varv from company to company, I.B.C. data suggest that over the past five years, operating expense for Ontario insurers is approximately 24.3% of earned premiums; therefore, I have arbitrarily used that figure in adjusting the cost per vehicle line (as on Figure 7.22).

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[25] Both Figures 7.21 and 7.22, as stated, express costs in 1981 dollars.

[26] Operating expenses includes all expenses other than claims adjustment expenses. Premium tax of 3.0% and licence fees of 0.4% have been included as part of operating expense.

Once operating expenses are included, the lines representing the total coverage claims cost per car and the average premium per car bear a significantly different relationship to each other. When operating expense is taken into account, it is evident that insurers were in a precarious position in 1985 before premiums were increased. There is no purpose to be served in attempting to analyze with precision the reason for the 1985 imbalance between loss costs and all operating expense and premiums. It seems reasonably clear that the insurance industry has no one to blame but itself for this situation. The 1985-1986 premium increase brought average premiums to a point slightly below, but reasonably close to, the equivalent cost line as adjusted for operating expenses. (See Figure 7.22). It should be noted that these data are not up to date in that 1986 data reflect loss expense premium experience only to June 30, 1986. Many insurers have indicated that the situation has improved since then.

In conclusion, I make the following observations:

1. The property damage part of third party liability presents no real cost problem and should not be the source of a premium concern.

2. Accident benefits coverage is an area where there has been an increase in average claims cost; however, I do not view the accident benefits part of the policy as being a coverage area where there is a cost/premium problem.

3. There is no cost problem with the optional collision and comprehensive coverage lines. Collision premiums may be higher than justified.

4. Bodily injury frequency has increased. The increase is not insignificant (.88 in 1982 to 1.09 in 1986, i.e., 24%) There is, however, evidence that bodily injury frequency has stabilized. There is some reason to conclude that the long-term frequency trend is down. Moreover, between 1982 and 1986 Ontario moved from recession to relative economic prosperity. An increase in accident frequency was one result. I think it is reasonable to forecast that accident frequency in the short future term should be stable at worst.

5. As long as bodily injury average loss costs per car continue to increase, premiums will increase. It is clear that there is a problem and that it will not simply go away. Costs have to be curtailed or premiums will continue to rise. I note, however, that the 1985-86 bodily injury/property damage premium increases brought

premiums and loss costs into a semblance of balance. There are current indications of moderation within the system at the third party level.[27]

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[27] Two examples are the Court of Appeal's recent F.L.R.A. pronouncements and the Court of Appeal's treatment of future care costs and gross-up in McErlean v. City of Brampton. See the discussion of these matters in Chapters 8 and 10.

CHAPTER 8

THE TORT SYSTEM OF COMPENSATION

A. OVERVIEW

In Ontario, motor vehicle accident victims receive more compensation from tort law than from any other source.[1] Liability in tort rests on the notion of "fault". In order to be compensated by tort law, one must prove that injury or loss was caused wholly or partly by the fault of another.

Under our system of justice, fault or responsibility for motor vehicle accidents is determined by settlement or the civil courts. All motorists are required to operate their automobiles with reasonable care. If a motorist's conduct falls below the standard of reasonable care that the law requires--if, in other words, the motorist is negligent-- a court will order the motorist to compensate victims for their losses or damages.[2]

Tort law seeks to reimburse the accident victims for all of the damages they have suffered. The basic principle for the measure of damages in tort is that the injured person should receive that sum of money which will as nearly as possible restore the victim to the position he or she was in before the accident. Tort law seeks to make the victim "whole".[3] Accordingly, innocent victims of motor vehicle accidents receive damages from a court not only for their pecuniary losses but also for their non-pecuniary losses. Pecuniary losses include loss of earnings, medical and rehabilitation expenses and out-of-pocket costs. Non-pecuniary losses are largely related to what is known as pain and suffering or loss of enjoyment of life attributable to the injury.

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[1] See Samuel A. Rea, Jr., Inquiry Research Study IV.

[2] See generally J.G. Fleming, The Law of Torts (6th ed.--Sydney: Law Book Co., 1983), Chaps. 1 and 6.

Liability premised on fault and full redress from the person whose liability is established are the two broad principles on which tort law deals with motor vehicle accident compensation.[4] There has been considerable debate about the role of tort law in dealing with redress for injuries occasioned by motor vehicle accidents. Books and articles attacking the tort system are legion. Many have called for the elimination of tort law compensation altogether for motor vehicle accidents.[5] Others have defended the tort system.[6] In this chapter I will sketch the evolution of the fault concept and consider the extent to which it has been modified in 20th century society. I will focus on the evolution of the tort system in relation to motor vehicle accident compensation and on the debate over the continued validity of tort in this area.

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[3] Fleming, The Law of Torts, Chap. 9, pp. 202-24. See Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229 at 240-242. Dickson, J., for the Court, reiterated the common law principle that in calculating damages for personal injuries, the court must consider what is the pecuniary sum which will make good to the victim as far as money can do, the loss which he has suffered as the natural result of the wrong done to him. Obviously, a seriously injured person can never be put in the position he would have been in if the tort had not been committed. Money cannot substitute for personal health and happiness. In this sense, Dickson, J. recognized that there cannot be "complete" or "perfect" compensation.

[4] P.H. Winfield and J.A. Jolowicz, Winfield and Jolowicz on Tort (12th ed. -- London: Sweet & Maxwell, 1984), pp. 15-16.

[5] See for example, R.E. Keeton and J. O'Connell, Basic Protection for the Accident Victim (1965); J. O'Connell, The Lawsuit Lottery (1979); T.G. Ison, The Forensic

I think it is important to recognize that tort law is not the only means by which victims of motor vehicle accidents in this province receive compensation for their injuries. Commencing in 1969 on an optional basis, and since 1972 as required coverage, the standard automobile insurance policy in Ontario has provided for limited accident benefits payable without regard to fault.[7] These

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Lottery (1967); E. Bernzweig, By Accident, Not Design (1980); P.S. Atiyah, "No fault Compensation: A Question That Will Not Go Away," Tulane L. Rev. 54, no. 2 (1980): 271; B. Dunlop, "No fault Automobile Insurance and the Negligence Action: An Expensive Anomaly," Osgoode H. L. J. 13, no. 2 (1975): 439; S.D. Sugarman, "Doing Away With Tort Law," Calif. L. Rev. 73, no. 3 (1985): 558.

[6] See for example, Gary Schwartz, "The Advantages of Tort," Proceedings of a Seminar on Personal Compensation for Injury, Australian National University (1984); W.J. Blum and H. Kalven, "Public Law Perspectives on a Private Law Problem -- Auto Compensation Plans," U. of Chi. L. Rev. 31, no. 4 (1964): 641; A.M. Linden, Canadian Tort Law (3rd ed., 1982), Chap. 1, pp. 1-28; A.M. Linden, "Canadian Tort Law: Yesterday, Today and Tomorrow," Proceedings of the 23rd Conference on Law and Contemporary Affairs at the University of Toronto (1987); L.N. Klar, Speech to Advocates' Society Fall Convention (1986).

[7] See the Insurance Amendment Act, 1966, S.O. 1966, c. 71, s. 11, proclaimed in force January 1, 1969. The Insurance Amendment Act, 1972, S.O. 1972, c. 66, s. 18(1).

no fault benefits are relatively modest.[8] They are intended to supplement rather than supplant compensation through the tort system. The right to sue in tort remains intact for motor vehicle accident victims injured in Ontario (although any no fault payments paid or available under the automobile insurance policy are deducted from the tort award).

In addition to the automobile no fault benefits, there are a host of social welfare plans and private insurance programs available to assist individuals injured in motor vehicle accidents. Unemployment insurance, workers' compensation, general welfare assistance, and short-term and long-term employment disability plans all provide benefits without regard to fault. Virtually every Ontario citizen is covered by hospital and medical care insurance.[9] What this signifies is that the present system of compensation for motor vehicle accident victims is not one based on tort recovery alone. The present Ontario accident compensation system is a mixture of tort and no fault plans, government and private schemes, general social assistance programs and those designed for special groups in society. Admittedly, these various schemes are uncoordinated, have no apparent consistent philosophy and provide an uneven range of benefits. No one seriously disputes that better coordination is required.[10]

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[8] The maximum weekly income indemnity was initially fixed at $70. It was increased to $140 per week in 1978 and has not been changed since then.

[9] See generally, Linden, Canadian Tort Law, pp. 4-5; Samuel A. Rea, Compensation for Automobile Accident Victims in Ontario: A Simulation (1987). -- (Inquiry Research Study IV).

B. THE EVOLUTION OF FAULT

The word "tort" is derived from the Latin word "tortus" which means twisted or crooked.[11] The expression found its way into the early English language as a synonym for the word "wrong". While "tort" is no longer used in everyday language, it has survived as a technical legal term.

Legal scholars have had considerable difficulty in finding a satisfactory definition of tort. Professor Fleming's is as good as any: "A tort is a civil wrong other than a breach of contract, which the law will redress by an award of damages."[12]

The principal, but not the only focus of tort law today, is on the casualties of accidents, the victims of unintentional yet harmful conduct of others. Liability based on fault or negligence is a development of comparatively recent origin. The earlier common law rule was that each person was strictly liable for the injuries that his conduct caused. Strict liability was premised on society's interest in security. The common law was preoccupied with preserving the peace and providing a substitute for private vengeance.[13] The individual interest in security required that the victim be compensated by the person who inflicted the injury regardless of the latter's motivation. Causation, not culpability, was paramount.

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[10] Some reformers argue for the replacement of the many different compensation plans by a comprehensive disability program. See, e.g., T.G. Ison, "Tort Liability and Social Insurance," U. of T. L. J. 19, no. 4 (1969): 614.

[11] See Lawson v. Wellesley Hospital (1975), 9 O.R. (2d) 677 at 681 (per Dubin, J.A.); affirmed on another point, [1978] 1 S.C.R. 893.

[12] Fleming, The Law of Torts, p. 1.

Gradually, tort law began to recognize the moral quality of conduct. Moral culpability became the basis for tort law and courts came to accept the principle of "no liability without fault". The notion of fault was firmly planted in a philosophy of individualism, a belief in individual responsibility.[14] This required that those who were at fault for injuring their fellow citizens should face the consequences. It also required that individuals be treated as responsible for deciding what risks to bear and to what extent they should protect themselves from those risks.

The movement from an emphasis on security to an emphasis on freedom of responsible action generally coincided with and was no doubt influenced by the Industrial Revolution in England and the United States in the 19th century. Liability without fault was thought to impede industrial progress because it provided no opportunity to escape liability by being careful. A person would have the unenviable choice of paying the loss out of his or her own pocket or giving up the activity. Accordingly, fault alone was seen as justifying the shifting of losses from the injured to the wrongdoer. Tort liability was viewed as a deterrent, a method of accident prevention. A judgment against a tortfeasor served as a punishment to the wrongdoer and a warning to others. Tort law was intended to induce citizens to abide by standards of reasonable conduct. The system operated on the underlying assumption that a monetary judgment would be paid out of the wrongdoer's pocket.[15]

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[13] See Fleming, The Law of Torts, pp. 6-9; R.A. Epstein, "Automobile No-Fault Plans: A Second Look at First Principles," Creighton L. Rev. 13 (1980): 769.

[14] Fleming, pp. 6-9; Atiyah, "No Fault Compensation."

The basic principle of "no liability without fault" had significant moral and emotional appeal.[16] It accorded with people's sense of fairness and justice. It was a principle epitomized by the belief that careless people ought to pay for their mistakes. It was entirely reasonable that a given loss be lifted from the shoulders of an innocent victim and placed in the hands of a morally culpable defendant. In this way, the victim was compensated for the loss; the defendant was also punished and the public deterred from similar conduct. Tort law played both a compensatory and a deterrent role.

C. DEVELOPMENTS OF THE TWENTIETH CENTURY

As tort law was concerned with the adjustment of risks and the extent to which injuries to persons and property should be compensated, it was inevitable that it be influenced by changing social conditions. For example, in the early stages of the common law, tort law was mainly concerned with the infringement of protected interests in land. There were few cities and little industry. Industrialization, urbanization, the development of highways and the increasing use of the automobile and other forms of transportation had the effect of broadening the reach of tort law and shifting its emphasis from injury to land to other forms of property interest, and to compensation for personal injuries.[17]

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[15] See Fleming, The Law of Torts, Chap. 1.

[16] See for example, P.H. Osborne, A Critical Evaluation of Liability Insurance, Litigation and Personal Injury Compensation: The Lessons and Choices for Ontario. A paper prepared for the Ontario Task Force on Insurance (1986), p. 3.

As we advanced into the 20th century, the notion of individual responsibility for social conduct was increasingly challenged by a growing emphasis on the responsibility of the community for losses resulting from accidents. Given a society in which the number of accidents of all kinds was increasing dramatically and was considered by many to be inevitable in the modern world, the traditional principles of tort liability seemed too narrow a basis to address the real compensation needs of accident victims. The result was a dramatic reform in the application and scope of tort law and the proliferation of alternative or additional compensation systems. This led many to conclude that the principal function of tort law had shifted from deterrence of the wrongdoer to compensation of the injured. Where tort law was not seen to be sufficiently responsive to the needs of the 20th century accident victim, there was pressure to modify its principles or reject them entirely.[18]

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[17] See generally, Wolfgang Friedmann, "Tort, Insurance and Social Responsibility," Chap. 5 in Law in a Changing Society.

Changes in the application of tort law were manifest in a number of ways:

(a) The most radical change was the abandonment of tort law and the notion of fault in the field of work-related accidents. The prospects for an injured worker to recover in tort were severely limited by three common law defences: the fellow servant rule, the contributory negligence defence and the voluntary assumption of risk principle.[19] As industrialization grew, it was considered neither fair nor economical that the accident victim in the workplace be left to fend for him or herself unless these obstacles to recovery could be overcome. Industrial accidents came to be viewed as largely inevitable. The losses from injuries to workers came to be regarded as a "cost" of the enterprise. It was recognized that the employer could bear these costs more easily than workers because employers could pass them on to consumers in the form of increased prices.[20] It was out of these sentiments that workers' compensation legislation was born. Ontario's Workmen's Compensation Act of 1914 served as the model for Canada.[21] The common law remedy in tort was abolished. Compensation to injured workers was paid without regard to fault. Payments were financed by employer contributions, thereby internalizing the costs of work-related injuries.[22]

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[18] For a general discussion of the evolution of tort law see G.L. Priest, "Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law," J. Leg. Stud. 14 (1985): 461; I. Englard, "The System Builders: A Critical Appraisal of Modern American Tort Theory," J. of Leg. Stud. 9 (1980): 27.

[19] See generally E. Bernzweig and also W. Friedmann, at pp. 169-171; see also Plant v. Grand Trunk Railway (1867), 27 U.C.Q.B. 878.

(b) Civil liability shifted in certain situations from the immediate tortfeasor to a third party who for any one of a number of reasons was considered to be in a better position to absorb the burden of compensation. An example of this is the acceptance of the principle of vicarious liability of the master for the torts of his servant.[23] A second example is the liability of the owner of an automobile for the negligence of the driver.[24] Vicarious liability improved the ability of the victim to be compensated, but undermined the notion of fault or moral blameworthiness.[25]

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[20] G.T. Schwartz, "The Vitality of Negligence and the Ethics of Strict Liability," Georgia L. Rev. 15 (1981): 963; Priest, "Invention of Enterprise Liability," pp. 465-66.

[21] S.O. 1914, c. 25.

[22] In most workers' compensation legislation in the United States, workers retain the right to sue at least third parties (i.e., a party other than the employer).

[23] Friedmann, pp. 168-169.

[24] In Ontario, legislation making the owner of a motor vehicle vicariously liable for the negligence of the driver was first enacted in 1930 with The Highway Traffic Amendment Act, 1930 (No. 2), 20 Geo. V, c. 48, s. 10.

(c) The same might also be said of the legislation that repealed the common law rule of contributory negligence as a complete defence to the plaintiff's recovery.[26] Ontario enacted such legislation in 1924.[27] In the view of some critics, to allow compensation to a person partly at fault was a departure from the traditional fault notion of punishing or deterring a wrongdoer and reflected an increasing concern with the desirability of compensation. On the other hand, it might be said that limiting a defendant's obligation in accordance with his degree of culpability was consistent with the principles of fault.

(d) Both by legislation and judicial interpretation, a variety of defences and immunities that plagued tort law in the late 19th and early 20th century were gradually eliminated.[28] One example concerns the legislation that precluded a gratuitous passenger from recovering from the negligent driver of the vehicle in which he or she was riding.[29] In 1966, the legislation was amended to permit a gratuitous passenger to recover compensation if insured by the driver's negligence, but only if the passenger could establish "gross negligence".[30] In 1977, the gratuitous passenger was placed in the same position as any person suffering injury or loss because of a driver's negligence. This, of course, is subject to the contributory negligence of the passenger and the now narrow doctrine of volenti non fit injuria.[31]

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[25] See Atiyah, "No Fault Compensation," p. 282. The obligation to pay is imposed on a person who is not morally culpable.

[26] See C.A. Wright, "The Adequacy of the Law of Torts," in Canadian Tort Law/ed by Linden (1968); Atiyah, "No Fault Compensation," pp. 284-285. In Professor Atiyah's view, the repeal of the common law contributory negligence rule has undermined the morality of the fault system more than any other single change in the law.

[27] See The Contributory Negligence Act, S.O. 1924, c. 32. The statute is now known as the Negligence Act; see R.S.O. 1980, c. 315, s. 2.

(e) There has been a steady expansion, particularly in American tort law, of the principle of strict liability. Its most prominent application is in the field of products liability law in the United States.[32]

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[28] See G.T. Schwartz, "Vitality of Negligence and the Ethics of Strict Liability," pp. 963-966. For example, the tort immunity of charitable institutions has been eliminated; inter-familiar immunities increasingly have been discarded, rendering spouses liable to each other and parents liable to their children and vice versa; in addition a broad governmental immunity has been replaced by a selected set of immunity rules.

[29] The Highway Traffic Amendment Act, 25 Geo. V, c. 26, s. 11 (adding s. 10).

[30] The Highway Traffic Amendment Act, 1966, S.O. 1966, c. 64, s. 20(2) (amending R.S.O. 1960, c. 172, s. 105(2)).

[31] The Highway Traffic Amendment Act, 1977 (No. 3), S.O. 1977, c. 54, s. 16. It is generally thought that the judgment of Estey, J. in Dube v. Labar, [1986] 1 S.C.R. 649 has restricted the practical application of the volenti doctrine.

(f) Negligence principles are now being applied in a variety of new areas.[33] For example, tavern owners may now be liable for failing to prevent their patrons from becoming so intoxicated that they become a danger to themselves and others.[34] Manufacturers of hazardous products now have a stringent duty to warn consumers of the attendant dangers of their products.[35] Accountants may be liable to potential investors in a company for negligently prepared financial statements.[36]

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[32] G.T. Schwartz, "Vitality of Negligence and the Ethics of Strict Liability," pp. 970-972. See also Priest, "Invention of Enterprise Liability," p. 507. At common law, the application of strict liability rules was basically limited to strict liability for trespassing cattle, animals known to be dangerous and ultra-hazardous activities, the latter under the rule in Rylands v. Fletcher (1868), 3 L.R. 330 (H.L.). See also Priest, pp. 507 and William L. Prosser, "The Assault Upon the Citadel (Strict Liability to the Consumer)," Yale L. J. 69, no. 7 (1960): 1,099. The first judicial adoption of strict liability in the United States in the field of consumer products came in Henningsen v. Bloomfield Motors Inc., 161 A. (2d) 69 (1960) and Greenman v. Yuba Power Products Inc., 377 P. (2d) 897. In Henningsen, the New Jersey Court ruled that a disclaimer in a product warranty excluding consequential personal injury was void as against public policy. In Greenman, the California Supreme Court led by Chief Justice Traynor announced the standard of strict tort liability for personal injuries caused by products. In 1964, the American Law Institute in its Re-statement (2d) of Torts adopted Section 402A which assigns liability to sellers for injuries from products in a defective condition and unreasonably dangerous though the seller has exercised all possible care in preparing the product.

[33] See Trebilcock, The Insurance-Deterrence Dilemma, pp. 31-33.

[34] Jordan House Ltd. v. Menow and Honsberger (1974), 38 D.L.R. (3d) 105 (S.C.C.).

Two other significant 20th century developments have greatly influenced the tort law system. The first was the widespread application of third party or liability insurance; the second was the proliferation of a number of first party insurance programs, both public and private, which were designed to provide income and medical protection to the victims of accidents.

Liability insurance has become commonplace. It has advantages for both the wrongdoer and the victim. It affords the wrongdoer some protection against the possibility of financial ruin. It assures the victim that his right to recover will not be illusory because the defendant happens to lack the financial resources to meet his legal obligations. The Pearson Commission in England reported that 94% of all tort damages in that country come from insurance sources and probably much of the balance is paid by self-insurers.[37] To the extent that the fault principle requires individuals to pay for their own mistakes by shifting to them the burden of the loss caused by their morally blameworthy conduct, the principle has been severely compromised by the advent of liability insurance.[38] The risk of loss falls not on the potential wrongdoer but is spread over time among the insurer's policyholders. With the accident prevention aspect of tort law diluted, compensation came to be viewed as the system's predominant function.

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[35] Lambert v. Lastoplex Chemicals Co. Ltd. (1972), 25 D.L.R. (3d) 121 (S.C.C.).

[36] Haig v. Bamford (1977), 72 D.L.R. (3d) 68 (S.C.C.).

[37] U.K. Royal Commission on Civil Liability and Compensation for Personal Injury. Report. - London: H.M.S.O., 1978. (Henceforth: Pearson Commission).

Liability insurance also meant that losses from accidents were no longer shifted from one individual to another. Instead, the costs of accidents were transferred from individuals to the industrial enterprise and to the insured activities that generated these accidents. Enterprises in turn spread the costs by increasing prices to consumers. This focus on loss distribution and the internalization of costs of a particular activity led to the enterprise theory of liability which significantly influenced the development of modern American tort law.[39]

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[38] Defendants still remain personally liable for any judgment in excess of their insurance coverage. It has also been suggested that tort law might also deter because of adverse publicity resulting from some tort actions and because at least some people do not relish being found liable by a court judgment. There is also potential for deterrence on the pricing of insurance premiums. To the extent insurance prices respond to changes in the level of care of individuals they may provide an incentive to safe conduct. Some tort scholars, such as Professor Gary Schwartz, are of the view that liability insurance is consistent with the notion of fault in that it enables the defendant to discharge his responsibility to the plaintiff.

[39] The phrase "enterprise liability" suggests that tort law can relieve the burden on individual victims by spreading their losses through price adjustments or liability insurance. See generally, G.L. Priest. The work of the American tort scholar, Fleming James, was very significant to the development of modern American tort law. James viewed personal injury damage judgments as a form of "social insurance". He saw accidents as

First party insurance has also affected the impact of the tort system. In Canada over the last half century, various first party social insurance programs -- unemployment insurance, sickness and disability plans, welfare programs, hospital and medical care plans -- have been implemented to cushion individuals from economic losses. These compensation mechanisms reflected the view that fault was too narrow a concept to solve all of the economic problems of a growing number of accident victims. The development of these social welfare schemes meant that the failure to recover in tort was not as significant as it once was.

D. TORT AND MOTOR VEHICLE ACCIDENT COMPENSATION

Although a no fault system of compensation for workplace accidents is now almost universally recognized, in the field of motor vehicle accidents most jurisdictions allow access to the tort system.[40] One explanation for this difference lies in the fact that the relationship between the motorist and the accident victim is completely different from the relationship between employer and employee. Moreover, historically, workers'

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inevitable consequences of productive activity and conceived the principal function of tort law to be compensation of the injured. He believed that what was required was to shift losses from plaintiffs who could ill afford to bear them to defendants able to spread them broadly over society by insurance or by adding some small increment to the prices of their products.

[40] No fault has not established the same presence in connection with motor vehicle accidents as it has in the workplace.

compensation legislation came about because of the need to protect economically disadvantaged industrial workers from the risk of loss resulting from injury whereas, originally, automobile owners were relatively few in number and were generally well-to-do. By the time automobile use became widespread, many countries in the western world had developed a variety of comprehensive social insurance and social security systems which reduced the pressure to abolish tort liability. Another explanation may lie in the fact that both the legal profession and the insurance industry[41] had a great deal at stake in the maintenance of the existing system and were able to exert a considerable influence against the widespread adoption of no fault systems of compensation.[42]

Nonetheless, for over a half-century there have been cries for comprehensive reform of the system of compensation for motor vehicle accidents. In North

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[41] The insurance industry in recent years, at least in Canada, has altered its position on no fault. In the mid-1970's, the insurance industry in Ontario proposed "Variplan", a form of threshold no fault. While the I.B.C. in its submission to the Ontario Task Force on Insurance argued for the maintenance of the existing tort system, before this Inquiry, the I.B.C. argued for threshold no fault.

[42] See generally, Friedmann, pp. 171-173. It may also be observed that a workers' compensation regime deals with a very specialized population. All claimants for no fault benefits are employed at the time of their injury and are involved in accidents arising out of and in the course of their employment. It is arguably more difficult to construct an efficient plan for motor vehicle accident victims since the plan has to include benefits for the unemployed, students, older people, self-employed and those at home maintaining the house and caring for children.

America, the 1932 Columbia University Committee Plan was the starting point for all subsequent attempts to reform the system.[43] The Columbia Plan proposed two basic changes in the tort system of compensation. First, it proposed legislation that would impose on the owners of motor vehicles a limited liability without regard to fault for personal injuries or deaths. Second, it proposed compulsory automobile insurance. As in the case of workers' compensation legislation, the remedy provided under the schedule of benefits would be an exclusive remedy completely replacing the right to recover at common law.

The Columbia Plan was the forerunner of the plan introduced by the Province of Saskatchewan in 1946.[44] The Saskatchewan Automobile Accident Insurance Act provided a schedule of modest no fault benefits but, unlike the Columbia Plan, permitted an automobile accident victim to obtain further compensation by suing in tort.

Apart from these initiatives, there was little interest outside academic quarters in any form of no fault compensation for automobile accident victims until 1965[45] when Professors Keeton and O'Connell published their landmark text, Basic Protection for the Traffic Victim.[46] Keeton and O'Connell strongly condemned the tort system and proposed a model statute which would limit the right to sue in return for guaranteed no fault benefits for income losses and medical expenses.

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[43] Columbia University. Committee to Study Compensation for Automobile Accidents. Report to the Columbia University Council for Research in the Social Sciences, 1932; and see Friedmann, pp. 173-174.

[44] Friedmann, pp. 174-75.

[45] For a summary of reform proposals put forward in the United States following World War II, see Morris and Paul, "The Financial Impact of Automobile Accidents," U. of Penn. L. Rev. 110, no. 7 (1962): 913. Ison criticizes the phrase "no fault" as a misleading label for reform on the ground that it implies the problems with tort liability are rooted in the fault principle. For Ison the basic

Keeton and O'Connell did not stand alone. The Report of the Royal Commission of Inquiry into Compensation for Personal Injury in New Zealand contained a powerful attack on the common law method of compensation.[47] Law review articles were highly critical of the way in which the tort system dealt with accidental injury.[48] The arguments of Keeton and O'Connell and others who favoured the elimination of the tort system and its replacement by a no fault system of compensation were made in persuasive terms.[49] At the risk of oversimplification, their main arguments may be summarized as follows:

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problems result from the use of any liability system at all. See Ison, "The Politics of Reform in Personal Injury Compensation," at p. 387.

[46] Keeton and O'Connell, Basic Protection for the Traffic Victim.

[47] New Zealand. Royal Commission to Inquire into and Report Upon Workers' Compensation, Compensation for Personal Injury in New Zealand (1967); G. Palmer, Compensation for Incapacity: A Study of Law and Social Change in New Zealand and Australia (1979).

[48] For a summary, see Priest; Morris and Paul.

[49] See Robert E. Keeton, "The Case For No-Fault Insurance," Miss. L. J. 44 (1973): 1, and Ison, "The Politics of Reform," U. of T. L. J. 27 (1977): 385 which, among many articles, summarizes the case for no fault compensation.

(a) Uncompensated Victims

Because there was a requirement to prove fault, some injured persons received no compensation. Some injured persons received no compensation or less than their economic losses even when fault could be established.[50] Several studies indicated that less than half of those killed or injured in motor vehicle accidents received any compensation from the tort system.[51] One of these studies was the Report of the Osgoode Hall Study on Compensation for Victims of Automobile Accidents, published in 1965.[52] It reported that 57% of motor vehicle accident victims in Ontario failed to recover anything from tort claims. Those in favour of no fault believed that virtually all accident victims would prefer the certainty of indemnification for their loss of earnings and medical expenses to the possibility of recovering an award of damages both for their economic losses and for pain and suffering.[53]

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[50] It may also be said that some plaintiffs settle for less than full compensation because of delay, immediate financial need and so forth.

[51] The United States Department of Transportation study entitled Motor Vehicle Crash Losses and their Compensation in the United States published in 1971 reported that only 45% of all of those killed or seriously injured in motor vehicle accidents received anything by way of damages from the tort system. A Michigan study showed that 63% of those injured on the roads in that state failed to recover. See A. Conard et al., Automobile Accident Costs and Payments (1964). A survey of 12,000 households in the United Kingdom carried out by the Centre for Socio-Legal Studies at Oxford University found that of the motor vehicle accident victims, only 31% derived some tort damages. In 1978, the Pearson Inquiry in the Report of the Royal Commission on Civil Liability and Compensation for Personal Injury, reported that only 6.5% of all those suffering injuries secure any tort compensation.

[52] See A. Linden, The Report of the Osgoode Hall Study on Compensation for Victims of Automobile Accidents, (1965).

(b) **Delay**

Even when the tort system did provide compensation, it was viewed as being too slow in making payments. A no fault system, it was argued, could deliver compensation to the victim and his dependants much more quickly. The delay in making payments in the tort system arises not only from the time needed to investigate and determine the question of fault but also from the tort system's emphasis on the once-and-for-all lump sum payment. In this environment, damages cannot be assessed until the extent of the victim's recovery is known.[54] The delays varied among jurisdictions, but in many places they were measured in years, not months. In practical terms, delay meant that tort was not effective as a source of support for the accident victim in the weeks and months immediately following the accident.

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[53] See for example, O'Connell, Lawsuit Lottery (1979), pp. 188-189.

[54] See Palmer, p. 24; Keeton, "The Case For No-Fault," pp. 3-4; Ison, "Politics of Reform," p. 386.

(c) **Inefficiency**

The tort system was also attacked as being inefficient and expensive. It was argued that too much of the insurance premium dollar was spent on administrative and claims-related expenses necessary to the investigation of fault and too little was returned to the accident victim by way of compensation.[55] By contrast, a no fault regime was said to return more of the premium dollar to the victim by way of compensation.[56]

(d) **Lack of Deterrence**

It was alleged that tort no longer fulfilled its historic function of accident prevention or deterrence. Liability insurance had undermined the tort system's usefulness as a deterrence mechanism.[57] To the extent that deterrence was important in the motor vehicle context, fear of injury to oneself, higher insurance premiums and the proper use of regulatory and criminal law sanctions were said to be far more effective deterrents to unsafe driving.[58]

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[55] See for example, Keeton, "The Case for No fault," p. 5 where he reports that the American Insurance Association cost study in 1968 demonstrated that only 44 cents out of every dollar in insurance premiums goes to pay the victim. The report of the British Columbia Royal Commission on Automobile Insurance in 1973 indicated that $1.60 in premiums was needed in order to deliver $1.00 in compensation to the accident victim.

[56] It is particularly argued that the claims administration costs are significantly higher in a tort system than in a no fault system.

[57] See for example, Palmer, p. 24; Dunlop, "No Fault Automobile Insurance and the Negligence Action: An Expensive Anomaly," pp. 445-446. Related to the deterrence argument is that tort, unlike no fault, has a role in educating the public as to the expected standard of behaviour. The counter-argument is that since only a small percentage of motor vehicle accident claims ever reach the courts and only a tiny percentage of those get

(e) Inadequacy of Fault as a Basis for Liability

The fault principle itself was attacked as being an inadequate criterion of liability in personal injury cases. Those in favour of no fault argued that few accidents involved true moral blameworthiness. Most were the result of errors in judgment for which the notion of fault was ill-suited.[59] The extent of the defendant's liability did not necessarily bear any relationship to the quality of his conduct. The most reprehensible driver conduct could result in the most minor of injuries while a moment's inadvertence or human error could lead to a catastrophic loss. Finally, many commentators argued that the fault finding process itself was unrealistic.[60] The personal injury trial was

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any significant publicity which, in any event, is likely to educate more as to the level of damage awards than as to the standard of care, it is an elaborate and expensive system to be maintained for such a dubious return.

[58] See New York (State) Insurance Department, Automobile Insurance...For Whose Benefit? (New York, 1970) at p. 12 and Ontario Task Force on Insurance, Final Report (1986).

[59] Keeton, "The Case for No-Fault," p. 6; Bernzweig, By Accident, Not Design.

[60] Dunlop, "No Fault Automobile Insurance and the Negligence Action: An Expensive Anomaly," pp. 445-446 where the author stated:

likened to a "forensic lottery".[61] In the words of the late Caesar Wright:

> Motor vehicle accidents are events which occur suddenly, taking the witnesses, including the participants, by surprise and resulting in imperfect perception. Months, even years, after the event, they are called upon to assess distances, relative speeds, time elapsed; all matters to which they have little or no experience. It is expecting too much of the trial process, effective as it may be generally, to elicit from them the truth, no matter how sincere the witnesses may be.

See also Green, Traffic Victims: Tort Law and Insurance (1958). For a contrary view, see Blum and Kalven, "Public Law Perspectives on a Private Law Problem -- Auto Compensation Plans," pp. 646-653. The authors argue that all adjudication, not simply the motor vehicle accident lawsuit is vulnerable to the inadequacies of evidence and the consequent exploitation of the situation by the skill of counsel. See also Spangenberg, "No-Fault Fact, Fiction, and Fallacy", Miss. L. J. 44 (1973): 15.

[61] The phrase is originally Professor Ison's. O'Connell in The Lawsuit Lottery states:

> The operation of the tort system is akin to a lottery. Most crucial criteria for payment are largely controlled by chance:
>
> > (i) Whether one is "lucky" enough to be injured by someone whose conduct or product can be proved faulty;
> >
> > (ii) Whether that party's insurance limits or assets are sufficient to promise an award or settlement commensurate with losses and expenses;
> >
> > (iii) Whether one's own innocent or faulty conduct can be proved;
> >
> > (iv) Whether one has the good fortune to retain a lawyer who can exploit all the variables before an impressionable jury, including graphically portraying whatever pain one has suffered.

> Lawyers supporting the trial jury are willing to admit that in the ordinary automobile accident the case that is actually tried by a jury is the case that never in fact took place and is the result of conjectural recall, imagination, colourful dramatization, and pure inventiveness.[62]

(f) Assessment Difficulties

It was argued that the tort system had a marked tendency to overcompensate minor injuries and to undercompensate those most severely injured. It was further argued that the assessment of lump sum future loss compensation was a speculative exercise. By comparison, a no fault regime could provide reviewable, periodic payment of compensation.

(g) Rehabilitation

The tort system was also viewed by its detractors as being particularly subversive of the rehabilitation of accident victims.[63] The tort system, it was alleged, would not provide the early intervention that is critical to the rehabilitation of the injured. Moreover, successful rehabilitation requires the victim to focus on future potential rather than past

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[62] Wright, "The Adequacy of the Law of Torts," in Studies in Canadian Tort Law/ed. by Linden; see also J.C. McRuer, "Liability Without Fault in the Law of Torts" in Changing Legal Objectives/ed. by Macdonald (1963), pp. 63-64. Former Chief Justice McRuer stated "I do not think Dean Wright has overstated the case, but I would not restrict his comments to those cases tried by a jury".

[63] Palmer, p. 25; Dunlop, pp. 443-444; see also T.G. Ison, "The Therapeutic Significance of Compensation Structures," Can. Bar Rev. 64, no. 4 (1986): 605.

> tragedy. Delayed lump sum tort system compensation provides a disincentive to early rehabilitation because the victim fears that appearing before a court fully healed or rehabilitated may reduce compensation.[64]

The concerted criticism of the tort system did have an impact. Many common law jurisdictions introduced legislation in the late 1960s and early 1970s to address motor vehicle accident compensation problems. The legislative response generally took one of three forms. The first and least extreme response was to provide automobile accident victims with limited first party no fault benefits without in any way restricting their right to sue in tort. The tort system was preserved, but with add-on no fault benefits. The second response, more radical in nature, was to provide victims with no fault benefits and abolish the right to tort law compensation for less severe injuries, but to permit a victim to recover damages if the victim could establish that the injuries met a prescribed threshold. The third response, most radical of all, was to make first party no fault compensation exclusive.

Among reforms to the tort system of compensation, add-on no fault benefits have attracted the widest support. The continuation of the tort system with add-on first party benefits was pioneered in Canada by Saskatchewan in 1946,[65] Ontario in 1969,[66] and British

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[64] Palmer, p. 25.

[65] See Linden, Canadian Tort Law. - 3d ed., pp. 629-31.

Columbia in 1970. Now all Canadian provinces except Quebec have legislation which provides first party no fault benefits to motor vehicle accident victims, but which in no way limits the right of the victim to a tort action.[67] A number of American state legislatures adopted this model as did two Australian states, Victoria and Tasmania.[68]

As the term implies, no fault benefits are paid to injured persons whether or not they are at fault. The amount and nature of the no fault benefits varied from jurisdiction to jurisdiction. Generally, they provided for some measure of income replacement, medical and rehabilitation expenses and death benefits. No fault benefits provided to a greater or lesser extent protection to the accident victim for his or her pecuniary losses. They were paid relatively quickly. For those with a tort action, they provided a measure of support until the action could be settled or tried. For those at fault, they provided some indemnification for financial losses.

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[66] See footnote 7, infra.

[67] No fault benefits are compulsory in all provinces other than Newfoundland, which retains an optional plan.

[68] See generally, Fleming, The Law of Torts, pp. 371-372. The state of Victoria proposes to implement a threshold compensation plan effective June 1988.

Threshold no fault plans originated in the United States.[69] They went beyond add-on plans and took the further step of abolishing tort actions for some injuries. The threshold was either set according to a monetary standard (for example, medical expenses of $1,000) or a verbal standard (for example, "serious impairment of body function") or a combination of both. A plaintiff could only recover non-economic compensation if the plaintiff's injuries (or disabilities) met or exceeded the relevant threshold. Costs saved in excluding cases below the threshold were to be used to finance the cost of no fault benefits for all accident victims thereby containing the costs of insurance premiums. At the same time, it was intended that the less serious injuries, which many regarded as being overcompensated by the tort system, would be taken out of the courts while those innocent victims who were more seriously injured maintained the right to sue for non-economic damages, as well as economic loss beyond that paid through no fault benefits.

Massachusetts was the first American state to enact a threshold no fault law. Its statute was passed in 1970, effective January 1, 1971.[70] In the succeeding few years, several other states passed similar modified no fault laws. By the mid-1970s, eighteen U.S. states had mandatory threshold no fault plans.[71]

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[69] See generally, Fleming, Law of Torts, pp. 372-373; U.S. Department of Transportation study: Compensating Auto Accident Victims (1985); James K. Hammitt et al., Automobile Accident Compensation, vol. 4: State Rules (Santa Monica, CA: Rand Corporation, 1985).

[70] Mass. Gen. Laws Ann., Chapter 90 effective 1/1/71. Puerto Rico also brought in a threshold scheme effective 1970. Puerto Rico Laws Ann. Title 9, Section 205.

The adoption of these threshold plans in the United States must be viewed in their political and social context. In some respects, threshold no fault represented a political compromise between those who favoured the elimination of the tort system and those who favoured its preservation. Threshold no fault was also viewed as a way to control rising insurance premiums. The adoption of threshold no fault was also influenced by the particular difficulties that an accident victim seeking compensation faced in the United States -- difficulties that were not prevalent in Canada. Most states in the 1960s operated under the common law rule of contributory negligence. If an injured person was even slightly at fault in an accident, he or she recovered nothing. Ontario abolished the all-or-nothing common law rule by statute in 1924.[72] Most American jurisdictions did not substitute a rule of "comparative negligence" until the 1970s.[73] Another difficulty concerned liability insurance coverage. While third party insurance was mandatory, American limits were very low, at least when measured by our standards and their judgments.[74] There were and still are large numbers of uninsured motorists in many American cities. The result was that many accident victims were undercompensated or left with unsatisfied judgments. There were also difficulties with the court system. Crowded court dockets and long delays added to the plight of those injured in motor vehicle accidents. Finally, the comprehensive social insurance and medical and hospital care programs that developed in Canada and other common law jurisdictions were largely absent in the United States.[75] All of these factors in varying degrees made an impact on the decisions of various state legislatures to enact no fault laws.

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[71] U.S. legislation is summarized in the 1985 Department of Transportation study and in the study by Hammitt et al. for the Rand Corporation (1985). See footnote 74, infra.

[72] S.O. 1924, c. 32.

[73] See Hammitt et al., Automobile Accident Compensation, vol 4: State Rules, pp. 4-7. Canadian and American terminology is different. The modern Canadian contributory negligence rule whereby a plaintiff even partly at fault can recover damages in a tort action (reduced in accordance with the plaintiff's degree of fault) is called the comparative negligence rule in the United States. It would appear that over 30 states in the U.S. did not adopt some form of comparative negligence rule until the 1970s.

Only two common law jurisdictions have taken the extreme step of abolishing all tort actions for compensation for motor vehicle accidents. Following a Royal Commission of Inquiry,[76] New Zealand in 1974 instituted a comprehensive system of compensation on a no fault basis not only for workplace and motor vehicle accidents, but for all "personal injury by accident".[77] The New Zealand plan is publicly administered by the government-operated Accident Compensation Corporation. In 1978, the Parti Quebecois government in Quebec launched a pure no fault plan for the compensation of motor vehicle accident victims administered by a government board.[78] The New Zealand and Quebec systems are discussed in greater detail in Chapter 11.

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[74] No Canadian province with the tort system has minimum third party limits less than $200,000. In most American states, the compulsory third party limits are well under $100,000. For example, in New York State, compulsory coverage is $10,000/$20,000 and in Michigan $20,000/$40,000.

[75] See Friedmann, p. 178.

[76] New Zealand. Royal Commission to Inquire into and Report Upon Workers' Compensation, Compensation for Personal Injury in New Zealand. Report of the Royal Commission of Inquiry (1967), known as the Woodhouse Inquiry.

E. TORT REFORM[79]

In the last decade, legislative enthusiasm for restricting or abolishing access to the tort system for motor vehicle accident compensation has diminished. No new schemes have been implemented and two states in the United States have repealed their threshold plans in favour of add on no fault benefits.[80] The new direction of reform has been to make changes in the tort law system itself. Principles governing liability and the assessment of damages have undergone legislative and judicial modification.

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[77] Accident Compensation Act, 1972, Statutes of New Zealand 1975, Volume II, p. 1409.

[78] The Automobile Insurance Act, L.Q. 1977, c. 68 and An Act to Establish the Régie de l'assurance automobile du Québec, L.Q. 1977, c. 67.

[79] The phrase has been used to cover a number of changes (some of which are not, strictly speaking, tort law changes) which affect the entitlement to and amount of compensation received by personal injury plaintiffs.

[80] See Atiyah, "No Fault Compensation," pp. 272-273. The two states that have repealed their threshold plans are Pennsylvania and Nevada. See the discussion in Chapter 11.

(a) Tort Reform in Ontario

There have been several important developments in the last fifteen years in relation to motor vehicle accident compensation in Ontario; some have been statutory, others have been common law developments. The overall impact of these developments has been to increase both the number of claimants entitled to tort compensation and to increase the amount of damage awards.

(i) Legislative Change

In 1973, the limitation periods in the Highway Traffic Act, Fatal Accidents Act and Trustee Act were increased from one to two years.[81]

In 1975, the Family Law Reform Act made it possible for a husband and wife to sue each other, and for children to sue their parents.[82] The Insurance Act and the Negligence Act were amended to accommodate these changes.[83] The Negligence Act amendments permitted contribution and indemnity between family members.[84]

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[81] The Highway Traffic Amendment Act, 1975 (No. 2), S.O. 1975, c. 37, s. 1; The Fatal Accidents Amendment Act, 1975, S.O. 1975, c. 38; The Trustee Amendment Act, 1975, S.O. 1975, c. 39.

[82] S.O. 1975, c. 41.

[83] S.O. 1975, c. 41, ss. 5, 7.

[84] S.O. 1975, c. 41, s. 7 (repealing the Negligence Act, R.S.O. 1970, c. 296, s. 2(4)).

In November 1977, the Judicature Act was amended to permit a successful plaintiff to recover prejudgment interest.[85] One clear objective of the amendment was to provide a defendant (or a defendant's insurer) with an incentive to resolve claims by payment at an early date. A less clear, but nevertheless reasonable objective, was to provide full compensation to the injured plaintiff who had been denied access to judgment or settlement proceeds until payment.

The Family Law Reform Act, 1978 (F.L.R.A.)[86] made a number of significant changes in the compensation rules. It repealed the Fatal Accidents Act and brought compensation in both fatal and non-fatal accident cases under the same statutory umbrella.[87] It expanded the statutory right to compensation by permitting relatives not entitled under the Fatal Accidents Act to claim for compensation.[88] The F.L.R.A. (and its successor, the Family Law Act, 1986 (F.L.A.)) permitted claims by the spouse, children, grandchildren, parents, grandparents, brothers and sisters of the deceased.[89] The F.L.R.A. provided for claims for compensation for the loss of guidance, care and companionship in bodily injury and fatal accident cases.

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[85] The Judicature Amendment Act, 1977 (No. 2), S.O. 1977, c. 51.

[86] S.O. 1978, c. 2, s. 79, repealing R.S.O. 1970, c. 164; S.O. 1973, c. 16; S.O. 1975, c. 38. Compensation in fatal accident cases was provided for in Part V of the Family Law Reform Act, R.S.O. 1980, c. 152 (now the Family Law Act, 1986, S.O. 1986, c. 4).

[87] The Fatal Accidents Act provided for compensation on behalf of parents, children, etc.

[88] S.O. 1978, c. 2, s. 60; S.O. 1986, c. 4, s. 61. For a comprehensive analysis of the guidance, care and companionship claims permitted by s. 60 of the F.L.R.A. see Mason v. Peters (1982), 39 O.R. (2d) 27 (leave to appeal to the Supreme Court of Canada refused).

As of July 1, 1978, accident benefits, contained in Section B of the standard automobile policy, were increased.[90] From a cost standpoint, the most significant increase was in the disability benefit from $70 a week to $140 a week maximum. Medical, rehabilitation, death and funeral benefits were also increased at that time.

In 1980, the Rules of Practice were amended to establish a 2.5% discount rate to determine the present value of an award for future pecuniary loss. The present rule provides:

> The discount rate to be used in determining the amount of an award in respect of future pecuniary damages, to the extent that it reflects the difference between estimated investment and price inflation rates, is 2 1/2% per year.

Before the introduction of the 2.5% discount rate rule, future losses were commonly being discounted at 7%, and sometimes at a higher rate. The reduction of the discount rate to 2.5% has worked to increase claims costs in fatal accident cases, and in those cases where injuries sustained were severe enough to cause future losses (future care and loss of future income).

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[89] O. Reg. 1004/78, s. 1(1).

[90] S.O. 1984, c. 11.

In 1984, s. 129 of the Courts of Justice Act was amended to permit the court, with the consent of all affected parties, to order the defendant to pay all or part of the award for damages periodically on such terms as the court considers just; and to order that the award for damages be subject to future review and revision in such circumstances and on such terms as the court considers just.

This section of the Act clearly permits what are known as structured settlements, but only on a consensual basis. Beyond establishing a pattern of future periodic payments, a structured settlement has the additional advantage of avoiding what has come to be called "gross-up".

(ii) Common Law Developments

In 1973, the Ontario Court of Appeal in Boarelli v. Flannigan confirmed that in Ontario collateral benefits paid to a plaintiff are not to be deducted from the plaintiff's third party tort recovery. As the law now stands, income indemnity payments of any kind and whether from public or private sources will not be deducted from the plaintiff's award for damages.[91]

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[91] For a review of the law on collateral benefits, see T.J. Collier and R.A.D. Watt, "Deductibility of Collateral Benefits -- Double Recovery?" Paper prepared for the Personal Injury Damages: Current Law Under Attack, program of the Department of Education, Law Society of Upper Canada, May 24, 1986; also see K.D. Cooper-Stephenson and Iwan B. Saunders, Personal Injury Damages in Canada (Toronto: Carswell, 1981).

In 1978, the Supreme Court of Canada decided three personal injury cases which have become known as the Trilogy.[92] In Andrews v. Grand & Toy Alberta Ltd., a 21-year-old motorcyclist became a quadriplegic when he collided with a van driven by an employee of Grand & Toy. In Teno v. Arnold, a 4 1/2-year-old girl was hit by a car as she tried to cross the street after buying ice cream from a street vendor. Her injuries were so severe that she would require assistance to perform even basic tasks for the rest of her life. In Thornton v. Board of School Trustees, a 15 1/2-year-old boy was seriously hurt attempting a somersault off a springboard in his high school physical education class. He missed the landing mats and suffered injuries which made him a quadriplegic.

In considering the cases together, the Court responded to the need for clear and consistent principles to govern awards of damages in severe personal injury cases. In addition to formulating guidelines with respect to compensation for future care costs and loss of earnings capacity, the Court examined the purpose of awards for non-pecuniary damages. Compensation under this head of damages involves consideration of such factors as pain and suffering, lost amenities and lost expectation of life.

In Andrews, Mr. Justice Dickson stated that if an injured person is properly provided for in terms of future care, large amounts should not be awarded for non-pecuniary loss. Non-pecuniary damages should serve the function of making life more "endurable" for the disabled person, above and beyond awards directly related to the injuries involved.[93]

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[92] Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229; Arnold v. Teno, [1978] 2 S.C.R. 287; Thornton, Tanner et al. v. Board of School Trustees of School District No. 57 et al., [1978] 2 S.C.R. 267. For a critical review of the Trilogy, see B. Feldthusen and K. McNair, "General Damages in Personal Injury Suits: The Supreme Court's Trilogy," U. of T. L.J. 28 (1978): 381.

The Court held that there should be a "rough upper parameter" in such awards, and that amounts should not vary greatly from one part of the country to the other. The amount awarded in Andrews, Teno and Thornton was $100,000. Although the Court approved consideration of individual cases ("in recognition of the inevitable differences in injuries, the situation of the victim, and changing economic conditions"),[94] $100,000 was fixed as the upper limit for non-pecuniary loss, save in exceptional circumstances.[95]

In Lindal v. Lindal, the Supreme Court of Canada confirmed that the upper limit was to be adjusted for inflation and fixed the date of its judgment in the Trilogy as the date from which the effect of inflation should be measured. The 1978 cap of $100,000 is equal to approximately $195,000 in 1987 dollars.

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[93] [1978] 2 S.C.R. 229 at 261-62. The Court took a functional approach to the award of non-pecuniary damages; also, see A.I. Ogus, "Damages for Lost Amenities: For a Foot, a Feeling or a Function?" Mod. L. Rev. 35, no. 1 (1972): 1.

[94] [1978] 2 S.C.R. 229 at 263, per Dickson, J.

[95] The Court's indication that higher awards may be given in exceptional circumstances has led to the challenges to the Trilogy cap in subsequent cases. The British Columbia Supreme Court awarded a severely brain damaged plaintiff $135,000 in Lindal v. Lindal, [1978] 4 W.W.R. 592 rev'd in part 115 D.L.R. (3d) 745; aff'd [1981] 2 S.C.R. 629, but the amount was reduced to $100,000 on appeal. A further appeal to the Supreme Court of Canada was dismissed. The case demonstrated that in practice it would be very difficult to establish a case for exceeding the limit on the basis of severity of injuries.

When the Trilogy cases were decided in 1978, no allowance was made for gross-up, that is the income tax liability on the investment income generated by the lump sum award for future care. The Supreme Court of Canada had recognized the need for gross-up in fatal accident cases where damages are assessed on the basis of a deceased's after-tax income (as compared to personal injury cases where the victim is awarded damages for loss of future income on a pre-tax basis).[96]

Then, in Fenn v. City of Peterborough[97] the Ontario Court of Appeal rejected the proposition that the Trilogy cases foreclosed the possibility of awarding an extra amount of money to pay the tax on investment income from a lump sum award for future care. The Court found that claims for an allowance for tax failed in Andrews, Teno and Thornton "for want of adequate proof". The evidence in Fenn was similarly insufficient, and the Court decided that it could not assess an amount for gross-up. But subsequent cases in Ontario have followed Fenn in principle and gross-up has become commonplace for awards for future care in personal injury cases.[98]

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[96] Keizer v. Hanna, [1978] 2 S.C.R. 342.

[97] (1979), 25 O.R. (2d) 399.

[98] Although Fenn has been followed in Ontario on principle, the appropriate amount to award for gross-up is still a contentious issue. The amount commonly awarded is 35%, but in the highly publicized case of McErlean v.

The situation is quite different in other provinces. Courts in both Manitoba and British Columbia have rejected the decision in Fenn and have refused to award tax gross-ups in some cases.[99]

From this summary of recent statutory and common law developments, it will be readily seen that the number of people entitled by law to motor vehicle accident compensation has increased and new rights to compensation have been created.

The cumulative impact of all of these advances in tort law is that more potential claimants per accident have access to increased rights of compensation in Ontario. The increase in damage awards was illustrated by Professor Rea in a recent recalculation of the damage award in Andrews v. Grand & Toy (one of the "Trilogy"). Having regard to the legislative and judicial changes in the method of assessing damages, Rea estimated that the 1978 award of $896,147 would be increased to $3,731,871 in 1986. This is an increase of 316% during a period when the price increase due to inflation was 84%. In constant

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Sarel and The Corporation of the City of Brampton (1985), 32 C.C.L.T. 199, the Ontario High Court awarded 153%. The Court of Appeal (in a judgment released September 10, 1987) overturned this decision and found that the gross-up should have been one-half the amount awarded.

[99] MacDonald v. Alderson, [1982] 3 W.W.R. 385 (Man. C.A.); Leischner v. West Kootenay Power & Light Co. Ltd., [1986] 3 W.W.R. 97 (B.C.C.A.); Scarff v. Wilson (1987), 39 C.C.L.T. 20 (B.C.S.C.). But see Watkins v. Olafson (1987), 40 C.C.L.T. 229 (Man. C.A.).

dollar terms, the award increased by 226%.[100] In light of examples like this, it is perhaps not surprising that the increasing size of tort awards became an issue for this Inquiry. The combination of higher awards and more claimants has led to increased costs for the automobile insurance system, a system funded by premiums paid by Ontario drivers.

(b) Tort Reform in the United States

The direction of tort reform in the United States has been somewhat different than in Ontario. Prompted by what was viewed as a crisis in liability insurance, more than two-thirds of the state legislatures in the United States have passed various reform measures, aimed at curtailing rights to compensation and to the amount of recovery.[101] These measures have not been specifically directed at tort actions arising out of motor vehicle accidents. Municipal liability and medical malpractice cases have been the chief focus of tort reform, although some measures apply more broadly. Chief among the legislative changes in the United States have been:

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[100] Rea, "Economic Perspectives on the Liability Insurance Crisis," Law Society of Upper Canada Special Lectures (March 1987).

[101] For a summary, see Business Insurance, (August 18, 1986). The survey conducted by Business Insurance indicated that 34 states had enacted tort reform measures to reduce liability exposures and to make insurance more available and affordable.

(a) a legislative upper limit or "cap" on damages for non-pecuniary loss;[102]

(b) abolition or modification of the common law doctrine of joint and several liability whereby a defendant even 1% at fault is legally responsible for the entire damage award;[103]

(c) legislation encouraging or requiring structured settlements in some personal injury cases;[104]

(d) legislation limiting punitive damage awards;[105] and

(e) legislation abolishing or modifying the collateral source rule, whereby a plaintiff is not obligated to reduce his tort award by any collateral source income that he receives.[106]

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[102] In some states, the cap on non-pecuniary damages has been restricted to medical malpractice actions only. In many states, the cap is particularly high, for example, $1,000,000 in West Virginia, Wisconsin and South Dakota (all restricted to medical malpractice cases) and $400,000 in Minnesota (applicable generally).

[103] The rule, in any event, has limited application in motor vehicle accident cases.

[104] In Ontario, structured settlements may be ordered by the court on the consent of the parties. See Courts of Justice Act, S.O. 1984, c. 11, s. 129.

[105] Punitive damage awards again are of little relevance in motor vehicle accident cases.

[106] This is the Ontario rule. See Boarelli v. Flannigan (1973), 36 D.L.R. (3d) 4 (Ont. C.A.). The collateral source rule is discussed in some detail in Chapter 10. According to Business Insurance, footnote 101, 10 states

(c) The Canadian and American Tort Systems

The call for tort reform in the United States to restrict personal injury compensation has prompted similar cries in Canada. Yet many of the reform measures urged in American state legislatures are already part of the tort system of this province. Many of those to whom I spoke in my travels in the United States looked upon the Ontario system with envy. The situation was best summed up by one American newspaper in which the following appeared: "Perhaps most significant every restriction that insurers seek to enact in the U.S. has long been the law in the Canadian province of Ontario."[107]

We should not then be oblivious to the important differences that affect the way in which accident victims are compensated in this province and in the United States. Several of these differences affect the delivery of motor vehicle accident compensation.[108] Among the major differences between the Canadian (or Ontario) and American systems that affect the cost, availability, and quantum of compensation for persons injured in motor vehicle accidents are the following:

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have passed legislation to modify the collateral source rule, so that payments made to plaintiffs from other sources such as medical insurance may be introduced as evidence and/or used to reduce an award.

[107] Oakland Tribune (May 13, 1986).

[108] The differences in the Canadian and U.S. tort systems are discussed in Michael J. Trebilcock, The Insurance-Deterrence Dilemma of Modern Tort Law, a paper originally prepared for the Ontario Task Force on Insurance (see the second draft of the paper, January 1987).

(a) American motor vehicle accident cases are almost invariably heard by juries which arguably injects more uncertainty into the system. Even where cases are tried by jury in Ontario, the reasonableness of the award is determined by the Court of Appeal against standards assessed by trial judges.

(b) Personal injury lawyers in the United States are paid by a contingent fee, that is a percentage of the damage award. It is thought by some that contingent fees lead both to more speculative actions being brought and to the inflation of damage awards by juries. The contingent fee is prohibited in Ontario. However, the negligence bar routinely charges claimants on a modified contingent fee basis.[109]

(c) As I have indicated, awards for non-pecuniary damages in Canada are subject to a relatively modest judicially imposed cap which, although increasing with inflation, is still less than $200,000. In most American states, there is no upper limit on the amount of this head of damages. Even in the few states where there is a legislatively imposed cap on these awards in motor vehicle accident cases, the cap has been set at $250,000 or more.[110] Damages for pain and suffering are a major component of United States personal injury awards.

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[109] See Chapter 9.

[110] The states with a cap on non-pecuniary damages applicable to motor vehicle cases include Alaska ($500,000), Colorado ($250,000 but damages up to $500,000

(d) Minimum mandatory third party liability coverage in Ontario is $200,000. In most American states, mandatory third party limits have remained very low, invariably in the range of $50,000 or less. For example, New York State has had $10,000/$20,000 limits in place for thirty years.[111] As a result, the risk of an unsatisfied tort judgment is much higher in the United States than in this province.

(e) In Ontario, O.H.I.P. provides medical and hospital coverage to virtually every citizen. There is no comparable universal government subsidized health care program in the United States.

(f) In civil actions in Ontario, the winning party normally is awarded "costs" against the losing party. In the United States each side bears its own costs. The Ontario rule discourages speculative actions; some would argue it discourages even legitimate actions.

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at the court's discretion), Florida ($450,000 but declared unconstitutional by the Supreme Court of Florida. See Smith et al. v. Department of Insurance, April 1987), Hawaii ($375,000), Maryland ($350,000), Minnesota ($400,000), New Hampshire ($875,000). See Business Insurance (August 18, 1986).

[111] I.B.C., Facts Book, 1986.

It is, in my view, important to recognize that these differences exist.[112] The question as to whether the tort system should be preserved for the compensation of motor vehicle accident victims in Ontario must be assessed in light of the way the system operates in this province. I think it fair to say that many of the concerns expressed about the American tort system do not apply to Ontario.

(d) The Future of the Tort System for Motor Vehicle Accident Compensation in Ontario

I have sketched the evolution of the tort system of compensation. What remains to be considered is whether access to tort law should remain part of the system by which we compensate motor vehicle accident victims in Ontario. This requires an assessment as to whether tort law still serves any social purpose. It also requires an assessment of the social and economic costs of maintaining or modifying the present system and of the benefits and costs of choosing an alternative compensation system. These issues are addressed in Chapters 10, 11 and 12.

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[112] There are other differences between the Canadian and U.S. tort systems discussed by Trebilcock, The Insurance-Deterrence Dilemma, e.g.

(1) Punitive damages are rarely awarded by Canadian courts but can be an important element of U.S. damage awards.

(2) The rules for class action suits are more permissive in the United States.

(3) The Supreme Court of Canada is the final appellate court for all types of cases including tort actions. It can, therefore, provide a measure of uniformity across the various provinces. The U.S. Supreme Court does not hear appeals on matters of purely state law which include most aspects of tort law, thereby leaving open the possibility of diversity of principles in the various states.

(4) The movement from negligence to strict liability in product liability law in the U.S. has not occurred in Ontario.

Unfortunately, the debate over the continued existence of the tort system in Ontario has taken place largely without the benefit of empirical evidence. In my opinion, to make an informed assessment of the tort system, it is important to determine answers to questions such as the following: Who is being compensated under the present system and from what sources? Who is not being compensated? What amounts are being paid for each of the components of a tort award? What are the legal and administrative costs associated with maintaining the tort system? What collateral sources of income support do Ontario drivers have if injured? Does the tort system deter unsafe driving or provide incentives to safe driving? I sought answers to these and related questions. I have considered existing research and commissioned research in areas requiring further study. I have also sought the views and opinions of the public, of those non-experts for whose benefit the motor vehicle compensation insurance system exists. As is evident in what follows, my own views have benefitted greatly from this research and from the opinions of others.

CHAPTER 9

CARS AND THE COURTS

A. LITIGATED CLAIMS

In the absence of a pure no fault system of compensation, there will continue to be some third party litigation. I recognize that my mandate is limited to motor vehicle accident cases; nevertheless, some comment on our system of litigating personal injury cases is appropriate. My comments will relate to third party claims.

This chapter deals with those relatively few claims in which an action is commenced and pursued. In general, the system should be structured to encourage early, as opposed to last minute, settlements. The system should be cost effective. Having those general goals in mind, these problem areas can be identified:

(a) Pleadings

In motor vehicle accident litigation, pleadings are unnecessarily complex and virtually of no help. All that should be required is an identification of the accident giving rise to the claim and the amount claimed; this is needed because of policy limits considerations. On balance, I see no real benefit to pleadings particularizing negligence. The statement of claim should set out the damages claimed for both economic and non-economic loss for each plaintiff and a statement as to the nature of the plaintiff's injuries. The statement of defence should briefly set out the defendant's position on both liability and damages. Motor vehicle accident pleadings have become programmed boiler plate. Can it be said that any litigant is really informed as to the real issues in an action arising from a motor vehicle accident, after reading cosmic allegations such as "he was an incompetent driver lacking in reasonable skill and self-command and ought not to have been operating a motor vehicle under the circumstances" or, for those interested in history, if not pleadings, "he had the last clear chance of avoiding the accident but failed to do so." I reject the argument that a jury's verdict must be tested against the allegations of negligence included in a statement of claim or statement of defence and counterclaim. Examinations for discovery will identify what a defendant is alleged to have done wrong and will allow all parties to identify the real issues in the action. It is surprising how often unsupported, irrelevant and sometimes absurd allegations of negligence go to inflame an opposite party who has occasion to be served with or given a copy of a pleading. Pleadings, as they are now structured in motor vehicle accident cases, are not much more than a make-work program attended to in most law offices by anyone but a lawyer.

Alternatively, if we are to continue to encumber pleadings with unnecessary detail, trial judges should be given specific authority to impose cost penalties on solicitors making unsupported allegations in pleadings. The client should not bear the burden as the client has absolutely nothing to do (in the vast majority of cases) with the pleadings.

(b) Pre-trials

All cases should be pre-tried and not placed on a trial list until certified as ready by the pre-trial judge or, in the absence of the pre-trial judge, another judge of the court. I fully endorse the recommendation of the Ontario Courts Inquiry that the pre-trial assume a position of greater prominence in the overall process. We have come to recognize, or perhaps admit, that one of the dominant purposes of a pre-trial is to promote settlement. A secondary purpose is to consider internal organization of the trial with a view to saving trial time.

In the motor vehicle accident context, when damages are in issue, pre-trial documentation should include:

(1) all medical reports of any doctor whose evidence will be tendered at trial, either in the form of *viva voce* evidence or by the filing of a medical report;

(2) any other experts' reports to be relied upon; and

(3) a breakdown of the party's position with respect to all aspects of economic loss; this would include special damages, loss of income to trial, future loss of income, and future care costs.

The parties should attend the pre-trial, where possible. If a defendant is insured, it would seem impractical to require a defendant to attend the pre-trial, unless policy limits are a relevant issue. Otherwise the parties should attend where possible. The presence of the parties will enhance the prospects of settlement and perhaps encourage counsel actually handling the file to appear in person at the pre-trial.

If at the time of the pre-trial conference either party requires a further medical examination, the issue of whether the action should be deferred on that account is a matter of discretion for the pre-trial judge and the ultimate discretion of the trial judge.

(c) Medical and Other Experts' Reports

There is a lack of consistency in the way medical and other experts' reports are dealt with both before and at trial. Before proceeding to recommended solutions, I should briefly identify what I think the objectives should be. First, medical and other experts' reports should be produced to avoid unfairness, that is, trial or even settlement by ambush. Second, the production and disclosure of experts' reports will enhance prospects of a fair settlement. That objective suggests that full and relatively early production and disclosure should be required. Third, from a cost and convenience standpoint, it is desirable that medical and other experts where practicable give their evidence by way of report, rather than attending at trial.

Having those objectives in mind, I propose to briefly consider the provisions of section 52 of the Evidence Act (medical reports and medical evidence); Rule 50.5 (pre-trial production of experts' reports, including medical reports); Rule 53.03 (the production of a summary of an expert's proposed testimony); and section 118 of the

Courts of Justice Act[1] and Rule 33.04 (independent medical or dental examinations; the production of medical or dental reports for the independent medical examination and the production of the medical report of the medical or dental examiner).

Section 52 of the Ontario Evidence Act provides[2]

> 52. (1) Any medical report obtained by or prepared for a party to an action and signed by a legally qualified medical practitioner licensed to practice in any part of Canada is, with the leave of the court and after at least seven days notice has been given to all other parties, admissible in evidence in the action.
>
> (2) Unless otherwise ordered by the court, a party to an action is entitled to obtain the production for inspection of any report of which notice has been given under subsection (1) within five days after giving notice ot produce the report.
>
> (3) Except by leave of the judge presiding at the trial, a legally qualified medical practitioner who has medically examined any party to the action shall not give evidence at the trial touching upon such examination unless a report thereof has been given to all other parties in accordance with subsection (1).
>
> (4) Where a legally qualified practitioner has been required to give evidence viva voce in an action and the court is of opinion that the evidence could have been produced as effectively by way of a medical report, the court may order the party that required the attendance of the medical practitioner to pay as costs therefore such sum as it considers appropriate.

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[1] S.O. 1984, c. 11.

[2] Evidence Act, R.S.O. 1980, c. 145.

The provisions of section 52 are somewhat convoluted. section 52 deals with notice, the production of medical reports, the use of medical reports at trial and the conditions precedent to a medical practitioner's right to give evidence at trial. It seems clear to me that the legislative intent was to reduce the cost of litigation by permitting medical evidence to be given by report. Filing of medical reports, rather than calling a doctor to give viva voce evidence, was not only permitted, but encouraged. Section 52(4) imposes potential cost penalties in circumstances where a doctor has given viva voce evidence and where the trial judge has concluded the evidence could have been given "as effectively" by filing a report.

The section 52 route to disclosure and production of medical reports is anything but direct. Section 52(1) deals with the admissibility of reports of medical practitioners and the seven days' notice required as a condition precedent to the admissibility of a medical practitioner's report. Section 52(2) deals with the production for inspection by an opposite party who has received notice of the medical reports that are referred to in section 52(1). Section 52(3) imposes restrictions on a party's right to call a medical practitioner to give viva voce evidence at trial.

The disclosure established by section 52 of the Evidence Act is late (seven days before trial) and pertains only to medical practitioners whose reports are to be filed at trial or doctors who will be called to give viva voce evidence at trial.

Section 52 applies only to medical practitioners, not for example, to dentists and other health professionals. In the case of other experts, a report must be provided 10 days before trial setting out the substance of the expert's testimony (see Rule 53.03).

The provisions of section 118 of the Courts of Justice Act and Rule 33 provide a somewhat circuitous route to production and disclosure of a plaintiff's medical reports. If a defendant has by order or on consent secured a defence medical (dental) examination, Rule 33.04 requires that the plaintiff provide the defendant with "any report made by a medical examiner who has treated or examined" the plaintiff. The production must be made seven days before the defendant's medical examination. The plaintiff does not have to produce reports of doctors unless they have treated or examined the plaintiff and the plaintiff does not have to produce medical reports of doctors, whom the plaintiff undertakes not to call as witnesses at trial. It should be noted that the term medical practitioners as referred to in section 118 of the Judicature Act and in Rule 33 includes dentists.

The pre-trial will also trigger production of medical reports. Rule 50.05 provides:

> 50.05 All documents intended to be used at the hearing that may be of assistance in achieving the purposes of a pre-trial conference, such as medical reports and reports of experts, shall be made available to the pre-trial conference judge or officer.

In practice, Rule 50.05 and the pre-trial itself provide the earliest required production of medical reports unless the defence has arranged its own medical examination. Rule 50.05, however, excludes medical reports not being relied upon, with the result that not all of the doctors' reports have to be produced. This can occur and, in my experience, has occurred in circumstances where a party intends to rely upon some, but not all of the doctors' reports. Further, Rule 50.05 only requires that medical reports, etc., be made available to the pre-trial judge.

The dominant goals, as earlier identified, should be to promote fair trials, early settlement and reduce the cost of litigation. The first two objectives are best served by the relatively early and full disclosure of all experts' reports. The cost objective will be best served if as much evidence as is reasonable is given by way of report.

The production, disclosure and use of experts' reports should be re-examined with a view to promoting early settlement and consistency and with a view to reducing the costs of litigation. This will require amendments to the Evidence Act and the Rules. I have the following recommendations with respect to medical and expert evidence:

(a) Given counsel's right to cross-examine, reports of all health professionals should be brought within the ambit of section 52 of the Evidence Act. I think of dentists, chiropractors, psychologists, physiotherapists and rehabilitators in particular. I can see no reason why the admissibility of their reports depends on consent. If counsel wishes to cross-examine any health professional, counsel may exercise that right, subject to the lurking sanction in the form of the cost provisions of section 52(4).

(b) Rule 53.02(1) should be resorted to more frequently. That Rule permits the evidence of a witness to be given by affidavit. For example, hospital records are brought to court by the hospital librarian, who may sit patiently for hours and then give evidence for seconds. If that kind of documentation is not to be filed on consent it should, in most instances, be proved by affidavit. There are many other examples.

(c) The production of medical (and other experts') reports should be required within seven days of counsel's receipt of those reports. Alternatively, the pre-trial should be the focal point for production of medical and other experts' reports. All such reports should be produced seven days before the pre-trial. Rule 50.05 and section 52 of the Evidence Act should be both expanded and tightened. It should be made clear that full production and disclosure of medical and other experts' reports must be made for pre-trial purposes. Rule 50.05 provides for limited disclosure for pre-trial purposes, as stated. An effective pre-trial cannot be conducted if the production of experts' reports is incomplete, or if only the pre-trial judge is given copies of the parties' medical and other experts' reports.

(d) Section 52 of the Evidence Act (as expanded to include other health professionals) should be made less cumbersome. Though most counsel routinely produce medical reports, not all do. The cumbersome provisions of section 52(2) require an opposite party to seek production of some or all of the medical reports referred to in the notice given under subsection (1). Surely a simpler route to disclosure would be to require counsel intending to file a medical report simply to produce it. Similarly counsel intending to call a doctor as a witness should be required to produce all medical reports of that doctor. The same would apply to other health professionals if brought within section 52 of the Evidence Act.

(e) As earlier stated, pre-trial disclosure, not disclosure seven days before trial, should be required. It should be made clear that doctors who have medically examined any party (section 52(3)) and doctors who are involved as consultants only, are subject to the same rules with respect both to medical reports and the doctor's right to give *viva voce* evidence at trial. There is now a conflict between subsections 52(1) and 52(3) in that regard. If a doctor's evidence is relevant and otherwise admissible, the evidence should be permitted to be given either in the form of the filing of a medical report, or by calling the doctor to give *viva voce* evidence. There is a virtually absolute right of cross-examination which would control abuses in resort to the section 52(1) evidentiary route.

(f) The trial judge should have the discretion to permit an expert's report to be filed as an exhibit in jury and non-jury trials, even if the expert will be called to give viva voce testimony at trial. As matters now stand, if a doctor is called to give viva voce evidence, the doctor's medical report or reports cannot be filed except on consent.[3] In non-jury cases, counsel consistently consent to the trial judge hearing the medical witness as well as to the witness's report being given to the trial judge, and often filed as an exhibit. This does not happen with frequency in jury actions. In cases where the interest of justice requires it, a trial judge can direct that a doctor's medical/legal report not be filed as an exhibit.

(g) In jury cases, trial judges, in their discretion, should be permitted to express an opinion to the jury as to a range of compensation for both pecuniary and non-pecuniary damages. This will require an amendment to the Courts of Justice Act because of the Court of Appeal's decisions in Gray v. Alanco Developments Ltd.,[4] and Howes v. Crosby.[5]

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[3] See Ferraro v. Lee (1974), 2 O.R. (2d) 417.

[4] 61 D.L.R. (2d) 652, [1967] 1 O.R. 597 (Ont. C.A.).

[5] (1984), 45 O.R. (2d) 449, 29 C.C.L.T. 60, 6 D.L.R. (4th) 698 (Ont. C.A.).

(d) Costs

It is virtually common ground that costs of litigation must be brought under control. How this may be done is beyond the scope of this Report. Moreover, it is clear that there are few instances where separate rules can be established to apply to motor vehicle or personal injury litigation in isolation. Nevertheless, the issue of costs, particularly as related to motor vehicle accident litigation, requires some comment.

The Ontario Courts Inquiry's recommendation as to expanding the Provincial Court (Civil Division) monetary jurisdiction to $10,000 should have a significant impact on costs in smaller motor vehicle-related bodily injury cases. The recommendation of the Ontario Courts Inquiry on costs in the Provincial Court (Civil Division) is that no costs in excess of assessable disbursements be paid. It might well be said that this recommendation will not lower costs, but simply reallocate costs in those cases where claimants are represented by counsel. If successful, instead of the defendant paying what we now characterize as party-and-party costs, thereby lowering the plaintiff's solicitor and client cost obligation, injured plaintiffs will be required to pay counsel out of their own resources. I think it is likely that there will be more than a reallocation of costs in the Provincial Court. Plaintiffs may well decide to make claims without the assistance of a lawyer in that Court. I will refer later to methods by which this can be encouraged.

Even if the implementation of the Ontario Courts Inquiry's recommendation results in nothing more than a reallocation of costs in the Provincial Court, insurance premiums will be lowered because insurers will not be required to pay costs other than disbursements to a successful plaintiff.

The Inquiry's Claims Survey revealed that party-and-party costs paid to claimants in cases where judgments or settlements were between $1 and $10,000 amounted to 11.3% of the claims dollar. These costs will not be entirely eliminated in that, for example, costs for medical/legal reports will continue to be paid. Nevertheless, the impact of the recommendation of the Ontario Courts Inquiry as to costs in the Provincial Court (Civil Division), will be significant. Inquiry Claims Survey data suggest that a 3% savings may be effected.[6] It remains to be seen what stance insurers will take in negotiating settlement of claims which are to be dealt with in the Provincial Courts or claims in any court which will result in an assessment within the monetary jurisdiction of the Provincial Court. I speculate that if insurers make any offer of costs above reasonable disbursements, costs will be dealt with on a much more modest basis than is the case now.

Litigants in the Provincial Court (Civil Division) should be encouraged to represent themselves. This has been dealt with in the Report of the Ontario Courts Inquiry. I recommend that all Provincial Courts (Civil Division) have assigned duty counsel to assist all those who require help at the pre-trial and at trial. Duty counsel at the pre-trial should ensure that plaintiffs, in particular, have filed offers to settle and that required evidence (such as medical/legal reports) is available. Medical evidence in the Provincial Court should almost always be in the form of a report, unless leave is granted to have a medical practitioner give viva voce evidence.

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[6] This estimate comes from the actuarial analysis of Inquiry Claims Survey data which includes party-and-party costs paid in all claims surveyed and for these purposes, particularly those claims between $1 and $10,000.

I am reluctant to enter the embryonic contingent fee debate, as I am aware that the issue is now being considered by a Committee of the Law Society of Upper Canada. I cannot, however, resist noting that we cannot afford to be too sanctimonious about the contingent fee issue as it relates to personal injury litigation. The personal injury bar is not unblemished by any contact with the evils of the contingent fee. I tend to think that these evils are not as significant as many seem to think. Any debate about contingent fees should take into account the fact that contingent fees are already used in personal injury litigation. Costs now paid by insurers to plaintiff's counsel are contingent in the sense that the amount of costs paid is most often established as a percentage of the total settlement. The lawyer's solicitor and client account to the personal injury plaintiff (the lawyer's fee net of costs paid by the insurer) is usually calculated on a percentage basis often having nothing to do with the work done or the value of the service, except to the extent that the amount of recovery is in itself evidence of the value of the service.

Fees in a typical personal injury settlement are often dealt with as follows: if an insurer and plaintiff's counsel agree to settle a personal injury claim for $30,000, the settlement package will involve the insurer paying the agreed $30,000 plus approximately $4,000 and perhaps taxable disbursements in costs. The taxable disbursements will include the cost of medical/legal reports. In some cases, the costs agreed to will be more than $4,000. In other cases, costs will be less than $4,000. I think $4,000 is a reasonable estimate of the costs in the example cited. Plaintiff's counsel will typically submit an account to the plaintiff in an amount between $7,000 (the costs paid by the insurer plus 10% of the settlement) and $8,500 (the costs paid by the insurer, plus 15% of the settlement). In this example, the contingency is the amount of the recovery, in that it is still open to plaintiff's counsel to charge on a time basis, etc. if the action commenced for the injured plaintiff is unsuccessful. The final result in personal injury litigation is that the normal fee structure is contingent if recovery is effected, and traditional if it is not. The modified contingent fee structure used in Ontario personal injury litigation is somewhat different than the typical American contingent fee arrangement. First, the American attorney's right to any fee is dependant upon success. Second, in Ontario insurers often pay between 10 and 15% in costs, however far along the road to trial the litigation has progressed at the time of settlement; in the United States insurers pay no party-and-party costs in most cases and the American attorney's contingent fee entitlement usually increases as steps towards trial or appeal are completed. Although I continue to be mystified why insurers in Ontario routinely pay 10-15% in party-and-party costs at virtually all stages of settlement negotiations, it is nevertheless clear that insurers' objective is to provide a very specific incentive for early settlement.

Serious consideration should be given at the trial level to making orders in the form of directions to the assessment officer with respect to disbursements. The trial judge is in the best position at the conclusion of a trial to consider the legitimacy of disbursements such as fees paid for medical, legal and actuarial reports. If appropriate, the trial judge can fix "part of" the costs of the party entitled to costs.[7]

I am told by assessment officers that to achieve some consistency, expert witnesses who attend trial are often dealt with for party-and-party costs purposes on the basis of the same hourly rate as is established for counsel. By and large, I think assessment officers can look after witness fees at trial. In some instances, the trial judge is in a better position to deal with costs related to reports that sometimes seem to me to be exorbitant. Paying $3,500 for an actuarial report to establish a $7,000 future loss, for example, offends my sense of the law of reasonable proportions.

If the recommendations of the Ontario Courts Inquiry are implemented concerning the Provincial Court (Civil Division), as I hope they are, some control on solicitor and client fees in that Court may be desirable. I recommend that the government and the Law Society of Upper Canada explore establishing some threshold upper limit on a lawyer's solicitor and client fee entitlement, at least in the Provincial Court where all legal fees will be paid by the claimant directly. The upper limit could be expressed in percentage terms (a percentage of the settlement). For example, if 15% was reasonable, a lawyer would be precluded from extracting more than 15% of a personal injury judgment or settlement from the injured client without having the solicitor and client account assessed. The assessment safety valve is necessary as there will undoubtedly be cases of complexity where an arbitrarily established upper fee limit would be both unfair and unreasonable. If we were to proceed to a full contingent fee system, the total solicitor and client fee would be determined by the contingent fee agreement and any regulation of its terms.

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[7] Rule 57.01(3).

(e) Offers to Settle

I endorse the existing emphasis established by the Rules of Civil Procedure on offers to settle, and would only add that additional emphasis should be placed on requiring plaintiffs in particular to make a settlement offer. It is the plaintiff who is seeking damages. The party from whom damages are sought is entitled to know what the plaintiff wants. The plaintiff should be required to make a settlement offer within 7 to 10 days after a pre-trial. There may be cases where that is impractical; I do not envisage rigid requirements. However, I think that reasonable settlements would be promoted and accelerated were the plaintiff required to make a settlement offer at least at the time when the plaintiff, through counsel, has asserted a readiness for trial. If the plaintiff is unable to determine what his or her settlement position is at that point, one would think the case is not ready for trial.

The failure of a successful party to make a settlement offer should be among those factors considered by the trial judge when costs are dealt with. Rule 57.01 should be amended to add this to the list of factors to be considered. The timing of settlement offers is already dealt with by the Rules. More emphasis should be placed on the existence of settlement offers.

B. MOTOR VEHICLE ACCIDENTS AND THE COURTS

The extent to which the courts are burdened with motor vehicle accident litigation is presented by some as a factor supporting the creation of a no fault or, as the Ontario Task Force on Insurance puts it, a "no tort system of compensation for motor vehicle accident-related injuries".

Motor vehicle accidents do not seem to place an undue burden on the courts, but even if motor vehicle accident cases did result in trial lists being clogged, it seems to me the court system, not the tort system, should be the primary focus of reform.[8] Put another way, any move to a different motor vehicle accident compensation system, or any decision to leave the present system wholly or partially intact should not, in my view, be based upon court list congestion.

Nevertheless, the issue of the extent to which court time is consumed by motor vehicle accident litigation deserves to be considered. I know I am on safe ground in stating that most trial judges acknowledge that the vast majority of motor vehicle accident cases (that is, cases on trial lists) are concluded by settlement, not trial. I would estimate that I have tried four or five murder cases for every motor vehicle case that has come before me and proceeded to judgment. My experience is not unique among Supreme Court judges.

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[8] In 1986, the Attorney General established the Ontario Courts Inquiry. Its recommendations are being considered.

In dealing with the court congestion issue, I chose not to examine Provincial Court (Civil Division) records for two reasons. First, the data are either non-existent or not particularly helpful; second, the Report of the Ontario Courts Inquiry recommended that the jurisdiction of the Provincial Court (Civil Division) be increased to $10,000, thereby dramatically reducing the significance of existing records.

The raw material for motor vehicle accident litigation comes from motor vehicle accident claims. In any analysis of the manner in which motor vehicle accident-related claims are disposed of, I think it is sensible to start with the claim itself.

Table 9.1 sets out the number of motor vehicle claims made, actions commenced, actions set down for trial, trials and judgments from 1982 through 1985. The number of bodily injury claims is set forth in brackets for each year under the total number of motor vehicle accident claims for that period.

Actions are sometimes commenced to ensure that the two-year Highway Traffic Act limitation period is not missed; because of the limitation period lawyers engaged in personal injury litigation often adopt a "sue now, negotiate later" stance. It follows that the commencement of an action is not reliable evidence of a breakdown in settlement negotiations. An action may be started before settlement discussions begin. In result, the number of actions started is not evidence of the breakdown of settlement negotiations.

TABLE 9.1

PROGRESSION OF MOTOR VEHICLE ACCIDENT-RELATED CLAIMS*

YEAR	CLAIMS** MADE	ACTIONS COMMENCED	ACTIONS SET DOWN FOR TRIAL	TRIALS	JUDGMENTS
1982	209,355 (30,919)	18,224	3,341	1,204	1,083
1983	194,753 (32,021)	17,643	5,296	1,226	1,041
1984	219,948 (38,184)	16,011	5,427	1,095	920
1985	232,207 (42,074)	16,842	5,583	858	711
TOTALS	856,263 (143,198)	68,720	19,647	4,383	3,755

* Includes both Supreme and District Courts, jury and non-jury trials.

** Number of third party liability claims reported in the I.B.C. Green Book. The number in parentheses refers to bodily injury claims.

It is readily apparent that the vast majority of claims are property damage, not bodily injury claims. Most property damage claims are resolved by insurers through resort to the intercompany settlement agreement (the fault chart). The quantum of loss is rarely a problem in a property damage claim dealt with in or out of court, according to information I have received both from insurers and members of the Bar involved in that kind of claim. There are, of course, some notable exceptions; on balance, establishing the amount of property damage is not a problem.

The general flow of claims to resolution by settlement or trial is more important than an analysis of the data in any one year. 1985's trials and judgments for the most part, do not come from 1985's claims or from actions started in 1985. What is important is the disposition rate of the system by settlement or by trial at least when looked at over a reasonable timeframe. Looking at the 1982 to 1985 time period was, in my view, sufficient. 1986 data were not available.

Although the number of bodily injury claims has increased from 30,919 in 1982 to 42,074 in 1985, the number of actions commenced has declined from 18,224 to 16,842 over the same period. It would appear that although information received from insurers suggests that more claimants are represented by lawyers than ever before, the number of claims settled before the commencement of an action has increased, albeit not significantly. The number of actions set down for trial has remained relatively stable from 1983 through 1985. I suspect (I put it no higher than a suspicion) that the reason substantially fewer cases were set down for trial in 1983 than in 1982, 1984, or 1985 was the recession which provided an incentive for the early resolution of motor vehicle accident-related disputes.

Looked at on an aggregate basis over the entire period dealt with in Table 9.1 (1982-1985), certain conclusions are evident. They are:

(1) the vast majority of all claims are resolved without any action being commenced;

(2) actions were commenced in less than 50% of the bodily injury claims;

(3) even when an action was commenced, more than two-thirds of those actions were resolved before the action was set down for trial. A significant majority of actions commenced involve bodily injury claims, not property damage claims. That is not to say there may not be elements of property damage loss involved in the claim; however, the dominant issue is the bodily injury claim; and

(4) between 2% and 3% of bodily injury claims go to trial. It is difficult to be more exact because some of the trials which are recorded in Table 9.1 would have involved property damage claims, not bodily injury claims.

It should be noted that the data contained in Table 9.1 do not capture the number of cases proceeding to examination for discovery or the number of cases which were pre-tried. Most actions which are set down for trial would have been actions in which examinations for discovery had been held. Almost all actions which were tried would have been pre-tried. Although pre-trials are not compulsory, few cases proceed to trial without being pre-tried. Data are not available as to the time and expense involved in conducting motor vehicle accident-related examinations for discovery. Nor are reliable data available as to the time spent on pre-trials in motor vehicle accident litigation. Data are available in some areas of the province as to the time spent on pre-trials; however, they do not disclose how much of that pre-trial time related to motor vehicle accident cases.

As indicated, a case is not generally considered to be eligible for trial until it has been pre-tried.

Therefore, the number of cases set down for trial at any given time is not particularly illuminating. Cases set down for trial are often far from ready for trial. The present system is being abused; in particular, cases are often set down for trial before examinations for discovery have been held or completed. The situation is further complicated by a practice direction requiring a pre-trial to be held within one year of the action having been set down for trial. Because of that practice direction pre-trials are at times scheduled before discoveries were completed.

I think it is important for administration purposes that there be a better identification of cases which are ready for trial. The most significant identifying factor is the completion of a pre-trial. I therefore recommend that the Rules of Civil Procedure be amended so as to create two lists:

(1) a list of cases set down for pre-trial; and
(2) a list of cases ready to be tried.

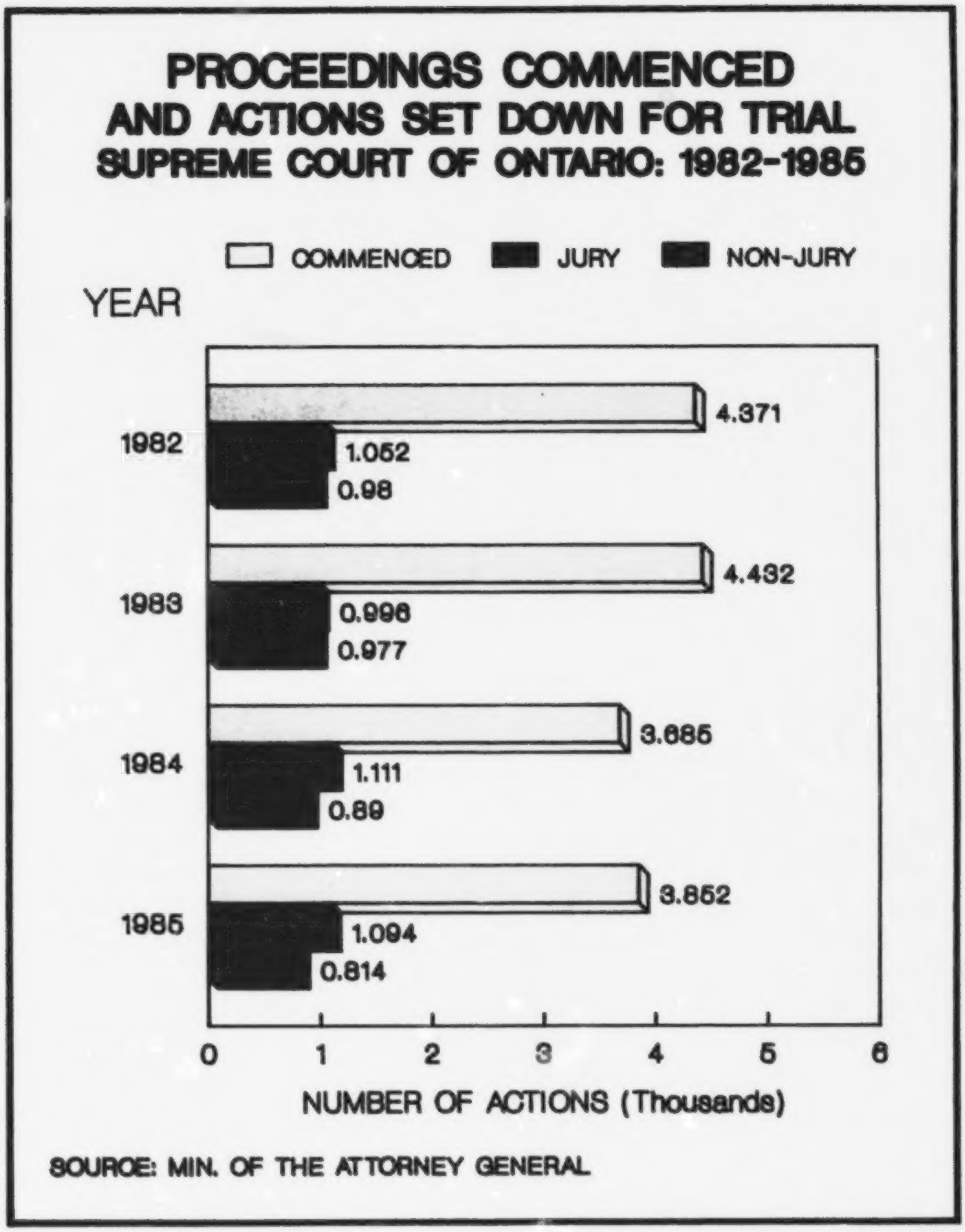
Actions should not be set down for pre-trial until counsel setting the action down has specifically certified that he has completed discoveries and is ready for trial.

The cases-to-be-tried list should consist of pre-tried cases which have been certified as ready for trial by the pre-trial judge. The onus should be on counsel to arrange the pre-trial. In this way, the trial list will disclose cases that are in fact ready for trial. The Notice of Readiness for Trial system has not accomplished this. For example, in June 1987 there were 1,642 cases on the Supreme Court non-jury list; only 305 had been pre-tried. It follows that the remaining 1,337 cases on the trial list were not ready for trial.

I further recommend that the Attorney General's data collection procedures be expanded so as to capture data relating to the number of, and time consumed by, pre-trials as related to the same classification of cases (including motor vehicle cases) on which data are now recorded.

Figures 9.1 and 9.2 show motor vehicle accident proceedings commenced and actions set down for jury and non-jury trial for the four-year period between 1982 and 1985 in the Supreme and District Court respectively. As can be seen in Figure 9.1, the number of actions commenced in the Supreme Court declined during the period 1982 to 1985, although there was a small increase in 1985 over 1984. The number of Supreme Court actions set down for both jury and non-jury trial remained more or less stable in that period. The same stability shows for actions set down for trial in the District Court (Figure 9.2).

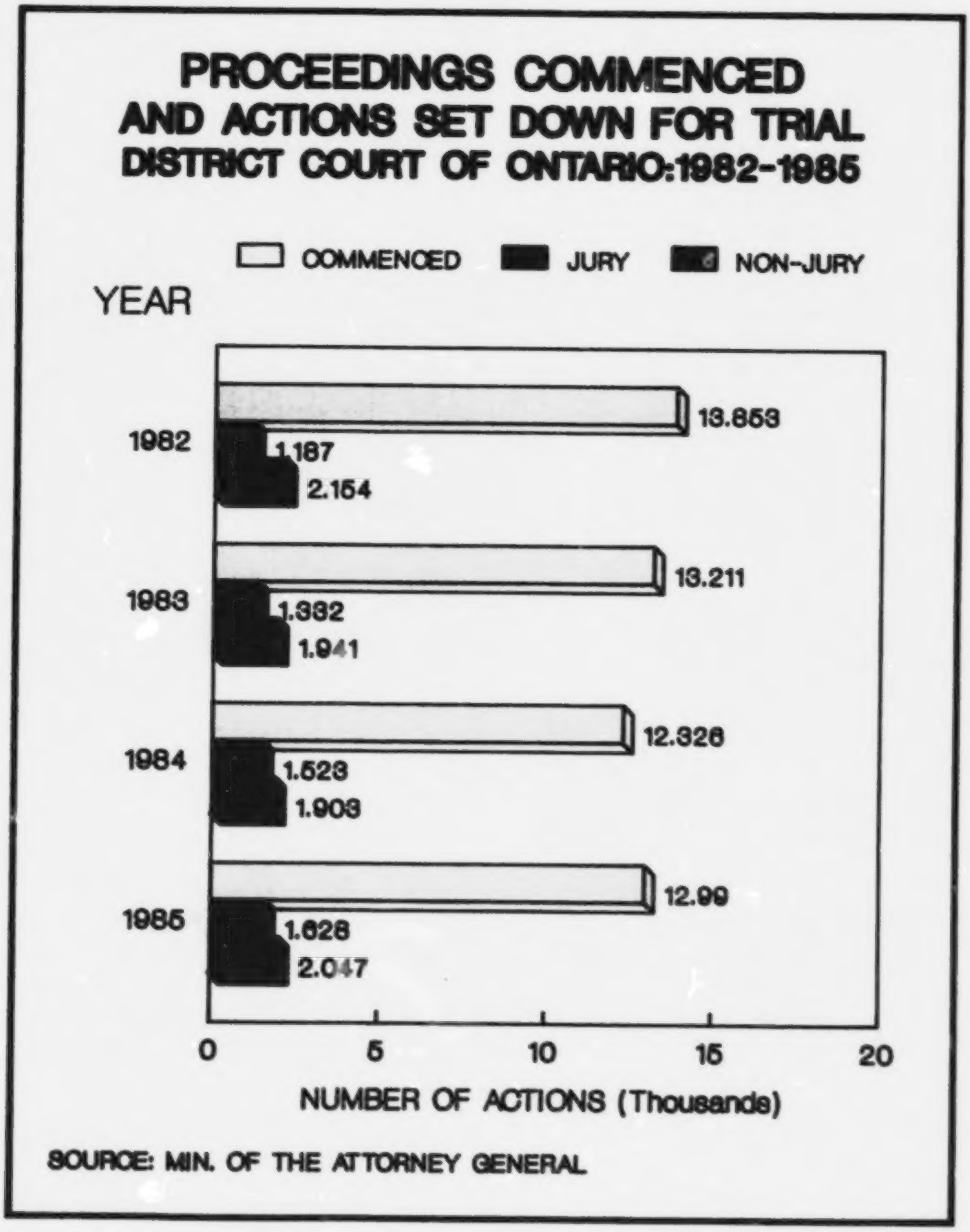
Figure 9.1



PROCEEDINGS COMMENCED AND ACTIONS SET DOWN FOR TRIAL SUPREME COURT OF ONTARIO: 1982-1985

SOURCE: MIN. OF THE ATTORNEY GENERAL

Figure 9.2



SOURCE: MIN. OF THE ATTORNEY GENERAL

Figures 9.3 and 9.4 show the percentage breakdown of motor vehicle actions on the Supreme Court trial lists in 1979-1980 (Figure 9.3) and 1985-1986 (Figure 9.4). Figures 9.5 and 9.6 show the same breakdown in the same years for District Court motor vehicle cases. All of these figures reflect all motor vehicle actions on the trial lists in the Supreme and District Courts including actions pending at close.[9]

There have been an increasing number of motor vehicle actions in which jury notices have been served (mostly by the defence). This requires some comment. In 1979-1980, 39.8% of motor vehicle actions set down for trial in the Supreme Court were jury actions; 60.2% were non-jury actions. By 1985-1986, the proportions were reversed; close to 60% of Supreme Court motor vehicle actions set down for trial were jury actions. In the Judicial District of York (Toronto) 74.4% of the motor vehicle actions set down for trial in 1985-1986 in Supreme Court were jury actions.

In the District Court in 1979-1980, 27.4% of motor vehicle actions set down for trial were jury actions. By 1985-1986, 47% of motor vehicle actions set down for trial were jury actions. In the Judicial District of York, 60% of the District Court cases set down for trial in 1985-1986 were jury trials. If the Judicial District of

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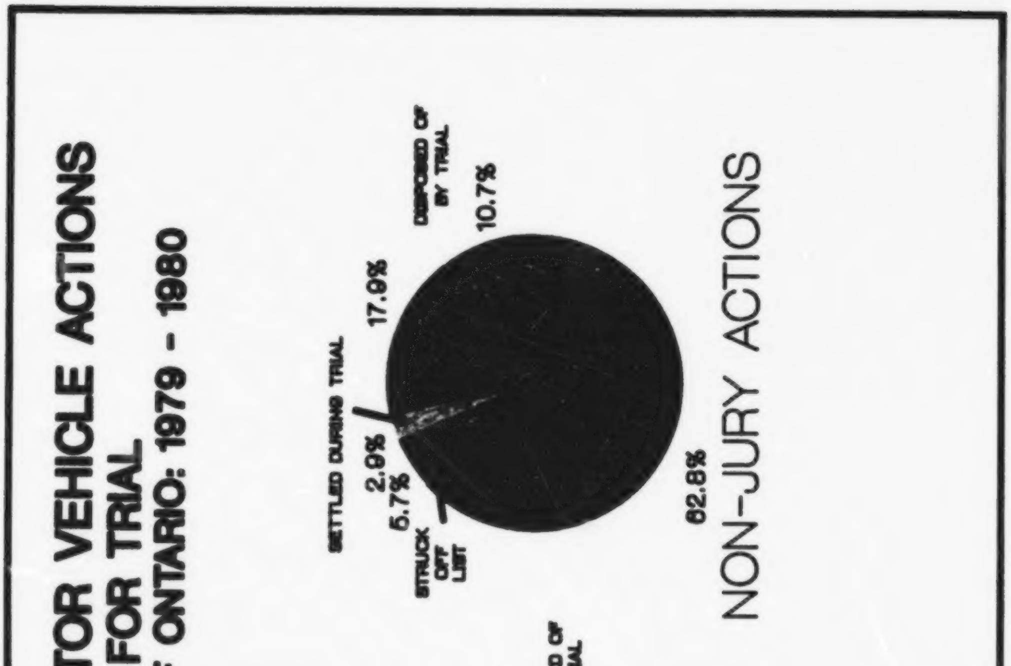
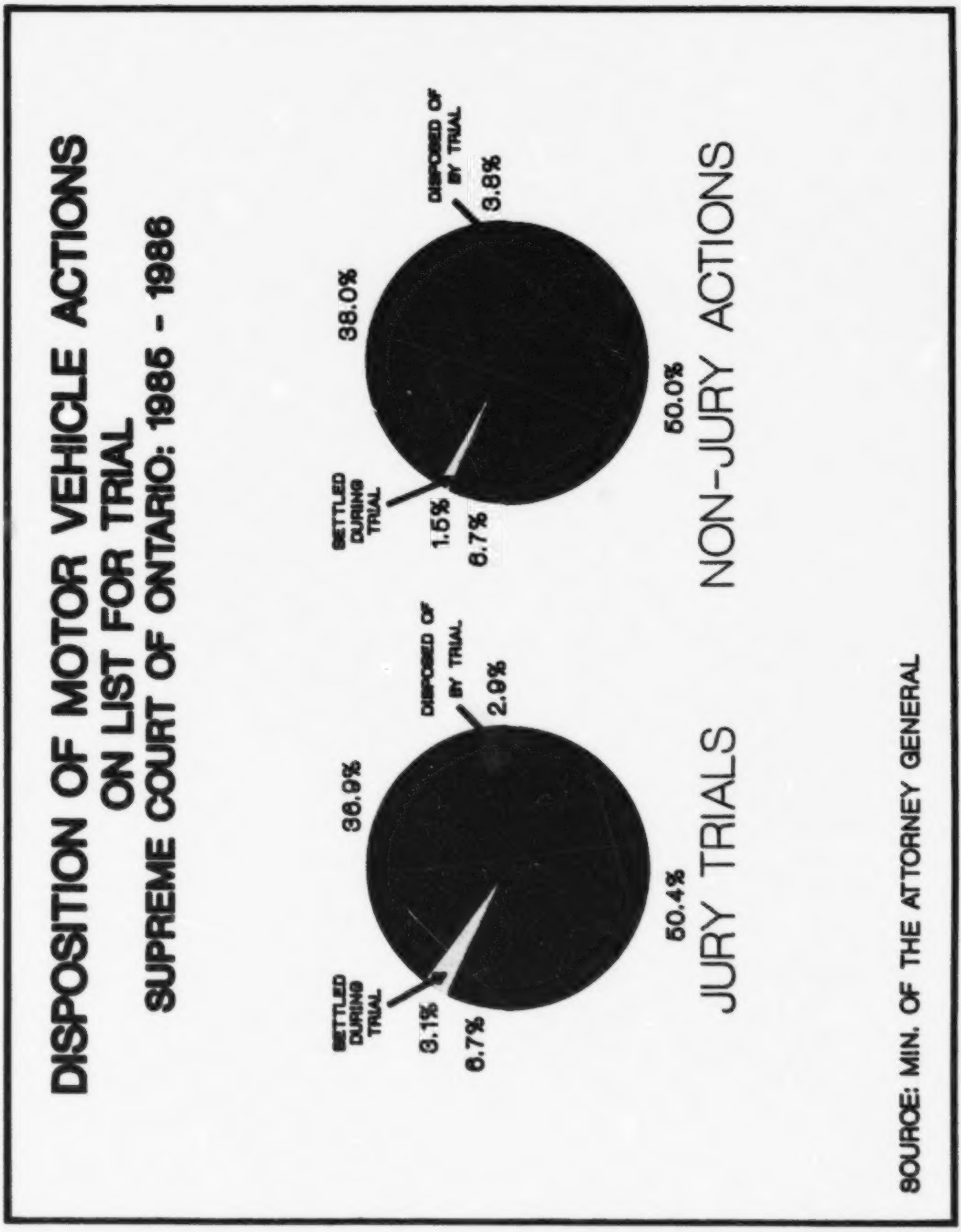
[9] The Ministry of the Attorney General's court records include the number of cases pending at close. These are cases which are not reached for trial or perhaps not ready for trial; in any event cases pending at close represent cases not actually dealt with by the system.

Figure 9.3



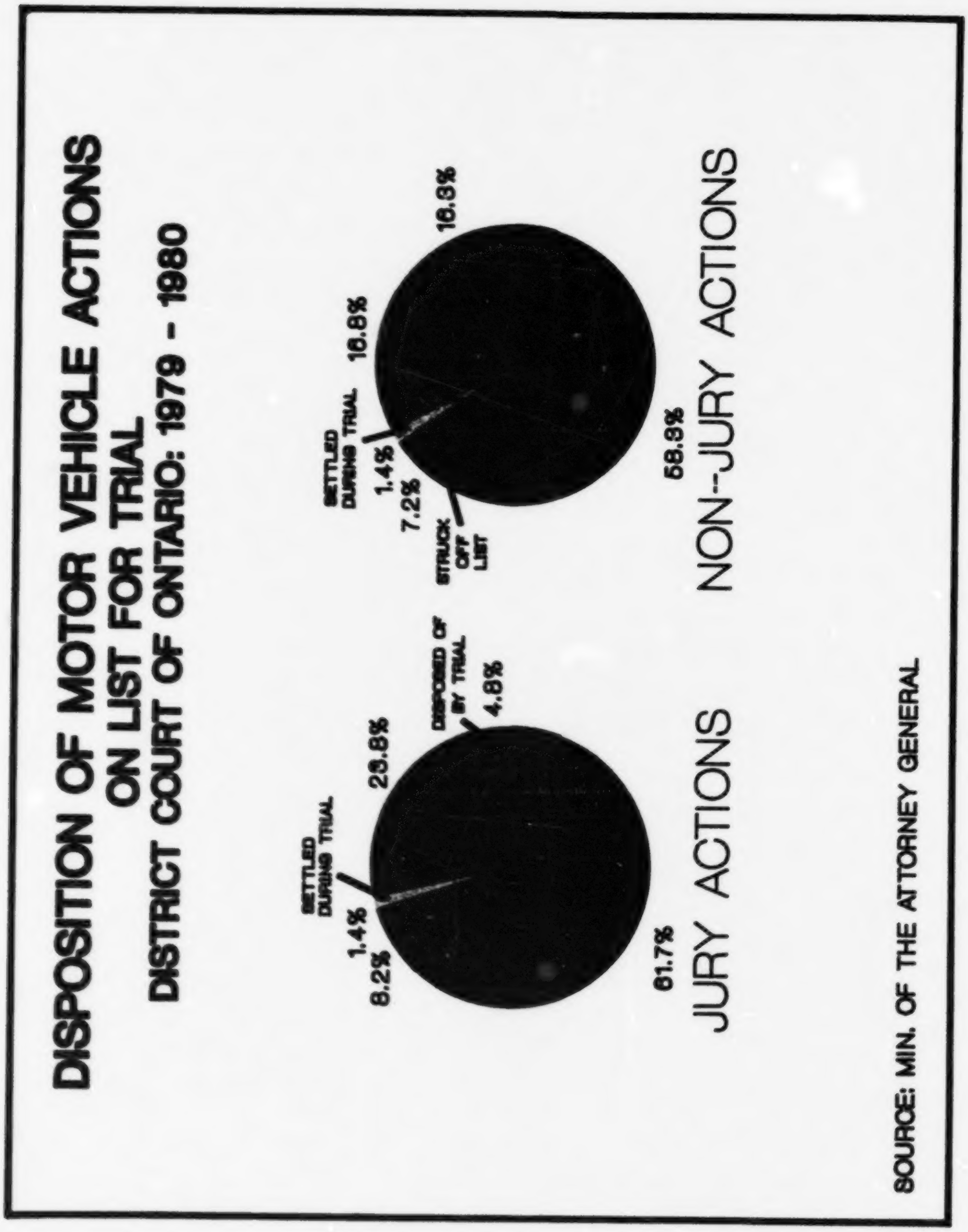
SOURCE: MIN. OF THE ATTORNEY GENERAL

Figure 9.4



SOURCE: MIN. OF THE ATTORNEY GENERAL

Figure 9.5

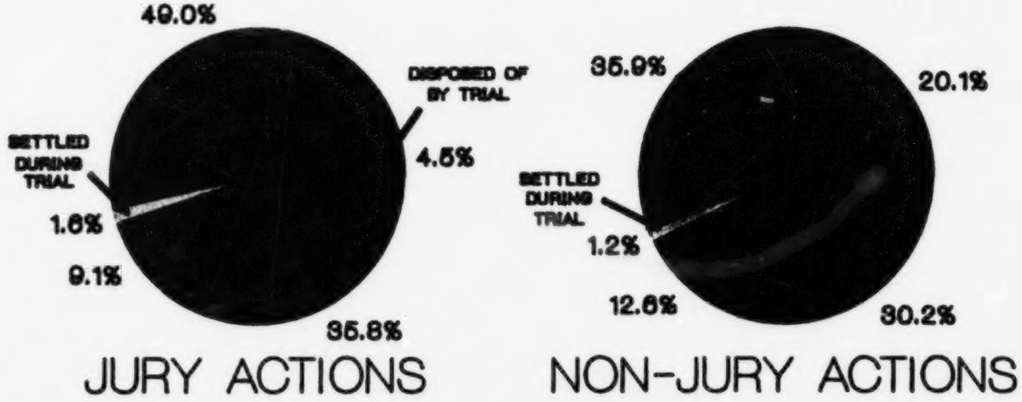


DISPOSITION OF MOTOR VEHICLE ACTIONS ON LIST FOR TRIAL
DISTRICT COURT OF ONTARIO: 1979 - 1980

SOURCE: MIN. OF THE ATTORNEY GENERAL

Figure 9.6

DISPOSITION OF MOTOR VEHICLE ACTIONS
ON LIST FOR TRIAL
DISTRICT COURT OF ONTARIO: 1985 - 1986



SOURCE: MIN. OF THE ATTORNEY GENERAL

York data are excluded, the District Court jury/non-jury experience in 1985-1986 indicates that 33.5% of District Court motor vehicle actions were set down as jury cases. Obviously, juries are resorted to more frequently by Toronto counsel in Toronto cases.

These conclusions seem to me to be evident from the available evidence:

(1) There has been a significant increase in the number of jury actions in both Supreme and District Courts.

(2) The increase in the delivery of a jury notice is most significant in Toronto in both courts. This is particularly so in Supreme Court motor vehicle cases.

(3) Most jury notices are served by defendants.[10]

(4) The percentage of Supreme Court cases which settled before trial was about the same for jury and non-jury cases in 1985-1986 (36.9% jury and 38.0% non-jury.) This is contrary to the popular wisdom that jury trials settled more often than non-jury trials.

(5) There has been a significant reduction in the percentage of Supreme Court motor vehicle non-jury actions tried. In the 1979-1980 period, 10.7% of non-jury motor vehicle actions were tried; in 1985-86 3.8% were tried. This decline is likely attributable to the increasing impact of the pre-trial in promoting settlement.

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[10] This is based on my experience and has been confirmed by registrars and trial coordinators.

(6) In the District Court in both 1979-1980 and 1985-1986, there was a substantial difference in the trial and settlement rates of jury and non-jury motor vehicle cases. In both timeframes, a greater percentage of non-jury actions went to trial. In 1979-1980, 4.8% of District Court motor vehicle jury actions were tried, while 16.3% of District Court motor vehicle non-jury actions were tried. In 1985-1986, 4.5% of jury actions were tried (almost the same as the 1979-1980 percentage), but 20.1% of District Court non-jury motor vehicle actions were tried. The rate of jury cases settled before trial is demonstrably higher in the District Court for jury than non-jury cases.

(7) In both the Supreme and especially the District Court, significant progress seems to have been made in the reduction of the number of cases pending at close between 1979-1980 and 1985-1986 (see Figures 9.3 to 9.6).

I have received some submissions recommending the abolition of civil jury trials. I think, on balance, the civil jury system ought to be preserved, although I recommend that the Ministry of the Attorney General examine the cost of civil jury actions and that the Ministry consider increasing the fee paid for setting an action down for jury trial. As earlier stated, in motor vehicle litigation, insurers caused most jury notices to be served. Almost universally, counsel for insurers suggest there are two reasons for this. First, the uncertainty created by the presence of a jury works to the advantage of the defendant (the defendant's insurer).

Most plaintiffs cannot afford to gamble; the insurer can afford to take the risk presented by the uncertainty of a jury verdict. Second, it is thought that juries, unlike trial judges, will reject most or all of the evidence of a witness if the jury finds reason to reject any material part of it. This propensity is more pronounced in those cases where there is some evidentiary foundation for the rejection of the plaintiff's evidence, or even the evidence of an expert witness. This, of course, works both ways. A jury may be more inclined than a trial judge to reject defence evidence; however, in practical terms, it is usually the plaintiff's evidence which is crucial to establishing damages and liability.

If the fees for setting an action down for a jury trial are increased, impecunious plaintiffs will not be placed in a disadvantageous position. If those plaintiffs are funded by legal aid, disbursements will be paid in the ordinary course of events. If an impecunious plaintiff is not assisted by legal aid, plaintiff's counsel will temporarily absorb the jury notice fee. If any reasonable fee is imposed it will, in the final analysis, be significantly less than the cost of a routinely acquired medical/legal report. That fee, if in the range of $50 to $100, should not pose an undue burden on litigants.

I do not mean to suggest that trial by jury should be viewed as a luxury. There are, however, significant costs which I have not examined which result from the service of a jury notice in a civil action. A jury panel has to be assembled; the entire panel is paid, albeit modestly. All jurors are paid for jury duty once selected as jurors. There are, in addition, external costs (time off work or time away from home, babysitting expenses, etc.) which I have not calculated.

Although it is useful to have data as to the percentage of cases tried, struck off the list, settled before trial, settled during trial and pending at close, those percentages do not disclose what percentage of cases actually dealt with by the system was tried. Cases pending at close and cases struck off the list represent cases not disposed of. As previously indicated, many of the cases pending at close, and for that matter most cases struck off the list, are cases which were not ready for trial.

Table 9.2 below sets out the breakdown of motor vehicle cases disposed of in the Supreme Court in 1979-1980 and in 1985-1986 with regard to trials, cases settled before trial and cases settled during trial. Table 9.2 provides a breakdown for all of Ontario, the Judicial District of York and the remainder of Ontario for the 1985-1986 period. Table 9.3 sets out the same information for the District Court in the same two timeframes. As indicated Tables 9.2 and 9.3 deal only with the cases which were dealt with by the system in the relevant time periods. The percentage calculations ignore cases pending at close and struck off the trial list. As can be seen from Figures 9.3 to 9.6 the percentage of motor vehicle actions pending at close was substantial in both timeframes assessed.

Table 9.2 shows a significant reduction in the percentage of cases tried in the Supreme Court in 1985-1986 compared to the 1979-1980 period. Of the Supreme Court non-jury motor vehicle cases disposed of in 1979-

TABLE 9.2

SUPREME COURT

CASES DISPOSED OF IN 1979-1980[11]

ONTARIO

JURY		NON-JURY	
Trials:	12.1%	Trials:	33.8%
Settled pre.:	79.3%	Settled pre.:	56.9%
Settled at:	8.4%	Settled at:	9.3%

CASES DISPOSED OF IN 1985-1986

ONTARIO

JURY		NON-JURY	
Trials:	6.7%	Trials:	8.7%
Settled pre.:	86.1%	Settled pre.:	87.7%
Settled at:	7.2%	Settled at:	3.6%

YORK

JURY		NON-JURY	
Trials:	4.3%	Trials:	8.1%
Settled pre.:	92.0%	Settled pre.:	92.9%
Settled at:	3.7%	Settled at:	0.0%[12]

REMAINDER

JURY		NON-JURY	
Trials:	9.6%	Trials:	8.9%
Settled pre.:	78.9%	Settled pre.:	86.3%
Settled at:	11.5%	Settled at.:	4.8%

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[11] Cases disposed of do not include cases struck off the trial list or cases not reached (pending at close).

[12] This figure must be wrong. Perhaps the 91.9% settled before trial figure includes cases settled after the commencement of trial.

1980, 33.8% were disposed of by trial; of Supreme Court non-jury motor vehicle cases disposed of in 1985-1986, 8.7% were disposed of by trial. The explanation for this change lies in the fact that there was a significant increase in the percentage of cases settled before trial.

Table 9.2 also shows a similar, if less pronounced, trend for Supreme Court jury trials in a comparison of 1978-1979 and 1985-1986 periods. In 1979-1980, 12.1% of the Supreme Court jury actions disposed of were tried; in 1985-1986, 6.7% were tried.

Table 9.3 shows a significantly lower trial rate for District Court jury and non-jury motor vehicle accident cases in 1985-1986 than in 1979-1980. In 1985-1986 in the District Court, 35.1% of the non-jury cases disposed of, were disposed of by trial while 8.2% of the jury cases disposed of were disposed of by trial. The District Court rate for motor vehicle jury cases settled before trial is 88.9%, and 62.8% for non-jury cases. One might speculate that if there were no motor vehicle jury trials, the system would be exposed to shorter but more trials.

It is apparent that in the District Court between the 1978-1979 period and the 1985-1986 period there was a significant increase in the number of non-jury cases settled before trial. It is this increase which has resulted in a lower percentage of cases being tried. In my opinion, it is likely that this change for the better is attributable to the expanding impact of the pre-trial process in the 1978-1986 period.

I have sought the advice of judges, lawyers, registrars and trial coordinators in attempting to

TABLE 9.3

SUPREME COURT

CASES DISPOSED OF IN 1979-1980

ONTARIO

JURY		NON-JURY	
Trials:	16.0%	Trials:	47.1%
Settled pre.:	79.3%	Settled pre.:	48.8%
Settled at:	4.7%	Settled at:	4.1%

CASES DISPOSED OF IN 1985-1986

ONTARIO

JURY		NON-JURY	
Trials:	8.2%	Trials:	35.1%
Settled pre.:	88.9%	Settled pre.:	62.8%
Settled at:	2.3%	Settled at:	2.1%

YORK

JURY		NON-JURY	
Trials:	6.9%	Trials:	29.7%
Settled pre.:	92.0%	Settled pre.:	70.1%
Settled at:	1.1%	Settled at:	0.2%

REMAINDER

JURY		NON-JURY	
Trials:	10.2%	Trials:	38.1%
Settled pre.:	84.1%	Settled pre.:	58.8%
Settled at:	5.7%	Settled at.:	3.1%

determine if the presence of motor vehicle action unduly burdens the courts. Their advice and the data previously referred to lead me to the conclusion that the courts are not overburdened with motor vehicle cases. There are a great number of motor vehicle cases on trial lists. There is no doubt that motor vehicle accident cases dominate civil jury lists. As has been previously stated, a great majority of motor vehicle cases set down for trial are resolved by settlement before trial. Human nature being what it is, many of those cases, although settled, are not settled until the last moment. This causes disruption to jurors and inconvenience to cases, both jury and non-jury, which may follow. At the District Court level, this problem will be reduced by the removal of cases under $10,000 from the District Court jury system. Obviously, the Provincial Court will have to be significantly expanded.[13]

I have reviewed data from registrars and trial coordinators in Toronto and in selected communities outside Toronto[14] in an attempt to determine the extent to which trial time is consumed by motor vehicle accident litigation. It is one thing to consider the percentage of motor vehicle accident cases that go to trial; it is another thing to consider how much of the system's time is consumed by those cases. No hard conclusions can be reached on the basis of the data I have received. Some motor vehicle cases are lengthy, lasting a number of weeks; other motor vehicle cases consume less than an hour of court time from beginning to end. It would appear that, on average, motor vehicle accidents take no more, or no less, time to try than other actions.

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[13] I assume there will be no juries in the Provincial Court.

[14] I am grateful to the Toronto Trial Office and to registrars or trial coordinators in Windsor, Welland, London, Kitchener and Sudbury.

I conclude where I began. Motor vehicle cases have an obvious presence on trial lists; however, as a result of settlements, motor vehicle litigation does not consume an inordinate amount of court trial time. While there may be other valid arguments to support the demolition of the tort system, the undue clogging of the courts is not among them.

More information as to resources committed before trial to motor vehicle litigation, and for that matter to all litigated claims, is required. I have in mind, judge time committed to pre-trials in motor vehicle and other cases. Data in this important area are not available.

CHAPTER 10

COMPENSATION ISSUES

A. INTRODUCTION

I received a number of submissions which recommended changes to certain of the existing legal principles governing compensation for victims of motor vehicle accidents. Some of the submissions dealt with changes to liability rules, others with changes to the rules relating to the assessment of damages. The proposals addressed six main issues -- gross-up, family law claims for loss of guidance, care and companionship, the collateral source rule, prejudgment interest, joint and several liability and the discount rate. All of these issues have application beyond motor vehicle accident compensation. They raise not only matters of principle, but also questions of cost. Many who urge "tort reform" view it as a means to preserve the existing system for compensation and at the same time, reduce its cost.

These issues have also been very recently dealt with by the Ontario Law Reform Commission (O.L.R.C.). In November 1985, the O.L.R.C. appointed Professor Stephen Waddams of the Faculty of Law, University of Toronto as Director of a Project on Compensation for Personal Injuries and Death (the O.L.R.C. Project). The O.L.R.C. Project was both broader and narrower than my mandate. It was broader in the sense that it dealt with compensation for personal injuries beyond those caused by motor vehicle accidents; it was narrower in that it was premised on the continued existence of the tort system.[1] The O.L.R.C. cooperated fully with the Inquiry by making available all of its research papers, together with Professor Waddams' own review. The O.L.R.C. Report was delivered to the Attorney General in November 1987. A copy of the O.L.R.C. Report was made available to me. I have reviewed the O.L.R.C. recommendations, and in what follows I have commented on them to the extent that I have felt it appropriate.[2]

B. FAMILY LAW REFORM ACT AND FAMILY LAW ACT CLAIMS

At common law, surviving family members had no cause of action for the death of one of their number.[3] The unfairness of this common law rule became more apparent as industrialization and the number of fatal accidents increased.[4] This led to statutory reform in England with the passage of Lord Campbell's Act in 1846. This statute, which became a model for wrongful death statutes elsewhere, gave certain surviving relatives a right of action to recover the damages sustained by them as a result of the death of a family member, provided that the deceased would have had a cause of action for the wrongfully inflicted injury. In 1847, Ontario passed the Fatal Accidents Act, the equivalent of Lord Campbell's Act.[5]

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[1] The issue of joint and several liability was not considered in the O.L.R.C. Project. It is, however, being considered by the O.L.R.C. in its Contribution Among Wrongdoers Project.

[2] I am grateful to the Chairman of the O.L.R.C. and to the Waddams Committee for their assistance.

[3] Baker v. Bolton (1808), 170 E.R. 1033; Admiralty Commissioners v. S.S. "Amerika", [1917] A.C. 38.

[4] Mason v. Peters (1982), 39 O.R. (2d) 27 (C.A.).

The courts consistently held that damages under the Fatal Accidents Act could be given for pecuniary loss only.[6] Damages, in the nature of a compassionate allowance or for grief or mental anguish or loss of companionship, were not recoverable. In the case of the death of young children, the rule limiting damages to pecuniary loss was particularly harsh. The most important loss was "companionship" and it was not compensable as it was essentially non-pecuniary in character.[7] The strict requirement of pecuniary loss was modified somewhat in Ontario in cases like Vana v. Tosta, where the loss of care and guidance suffered by a child as a result of a parent's death were held to be compensable.[8] In non-fatal cases, apart from the outmoded claim for loss of consortium, family members could not recover at common law for loss of care, guidance and companionship no matter how serious the injury to the victim.

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[5] 10 & 11 Vict. L. Chap. 6. The statutory remedy was afforded to the husband, wife, parent (including grandparent) and child (including grandchild) of the deceased.

[6] Mason v. Peters, at p. 31.

[7] Mason v. Peters, at pp. 32-33.

[8] Vana v. Tosta, [1968] S.C.R. 71; St. Lawrence and Ottawa Railway Co. v. Lett (1885), 11 S.C.R. 422. They were held capable of evaluation on a monetary basis and therefore compensable as pecuniary loss.

In 1978 the Family Law Reform Act (F.L.R.A.) was enacted.[9] It abolished the Fatal Accidents Act.[10] It put the law of Ontario with respect to fatal and non-fatal injuries on the same basis. It firmly established the entitlement to compensation for the loss of guidance, care and companionship in both fatal and non-fatal cases. The F.L.R.A. enlarged the circle of claimants to include brothers and sisters of the person injured or killed. The F.L.R.A. has now been superseded by the Family Law Act, 1986.[11] The new statute contains no changes in eligible claimants or in guidance, care and companionship compensation.

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[9] S.O. 1978, c. 2. Section 60 provided in part as follows:

60. (1) Where a person is injured or killed by the fault or neglect of another under circumstances where the person is entitled to recover damages, or would have been entitled if not killed, the spouse, as defined in Part II, children, grandchildren, parents, grandparents, brothers and sisters of the person are entitled to recover their pecuniary loss resulting from the injury or death from the person from whom the person injured or killed is entitled to recover or would have been entitled if not killed, and to maintain an action for the purpose in a court of competent jurisdiction.

(2) The damages recoverable in a claim under subsection (1) may include,...

(d) an amount to compensate for the loss of guidance, care and companionship that the claimant might reasonably have expected to receive from the injured person if the injury had not occurred.

[10] Family Law Reform Act (F.L.R.A.), S.O. 1978, c. 2, s. 79.

[11] S.O. 1986, c. 4, s. 61(2)(e).

Discussion of tort reform in this area has focused on subsection 61(2)(e), the subsection that allows compensation for the loss of guidance, care and companionship. In Mason v. Peters, the Ontario Court of Appeal held that "guidance, care and companionship including as they do imponderable elements of loss are essentially non-pecuniary in character".[12]

Insurers and others have made submissions complaining that there have been too many claimants seeking recovery under subsection 61(2)(e); that many claimants have successfully advanced claims of a minor or trivial nature; and that in the aggregate the awards have been costly. Three different proposals have been put forward to limit recoveries for loss of guidance, care and companionship. One proposal is to restrict recovery only to those losses of guidance, care and companionship that are either serious or permanent.[13] A second proposal involves restricting the eligible claimants to household members. A third proposal is to provide for conventional awards.[14]

Surprisingly, insurance company complaints about awards for loss of guidance, care and companionship have been made without any empirical data to indicate the aggregate cost of these awards. Insurers generally do not record what has been paid for family law claims.[15]

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[12] At p. 38. The court recognized that pecuniary loss concepts in cases involving the wrongful death of young children had provided awards wholly out of proportion to the true loss sustained by a child's death.

[13] This would add a new question to be litigated and may have the effect of inflating claims to bring them within the criteria of serious or permanent.

[14] This approach has been adopted in England and Alberta. See Nielsen v. Kaufmann, 54 O.R. (2d) 189.

Accordingly, the breakdown of the cost of components of motor vehicle claims became an important part of the Inquiry Claims Survey. The Claims Survey revealed that F.L.R.A. and F.L.A. claims payments accounted for 5.4% of all bodily injury liability claims paid.[16] The Claims Survey also showed that about 30% of F.L.R.A. and F.L.A. claims payments were made in non-fatal accident cases. It follows that 1.6% of bodily injury liability claims dollars goes to family law claims in non-fatal cases. The main focus of the complaints about compensation for loss of guidance, care and companionship are in non-fatal cases. The small amount involved detracts from the legitimacy of the complaint. In fatal accident cases it seems reasonable to conclude that pecuniary loss compensation exceeds compensation paid for guidance, care and companionship, at least in cases where the deceased

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[15] The I.B.C. in its 1987 claims survey did provide figures on family law claims, Appendix XVII.

[16] The full breakdown of bodily injury liability claim payments was as follows:

Past employment income loss	13.3%
Past out-of-pocket expense	2.5%
Future employment income loss	10.1%
Future care expense	1.4%
Non-pecuniary loss	45.7%
Family law claims	5.4%
Gross-up	0.4%
Party-and-party costs	11.0%
Prejudgment interest	10.2%
	100.0%

was an income earner. Because of the relatively few fatal accident claims in Ontario, it seems to me that the guidance, care and companionship part of settlements or judgments in those claims does not account for a very significant amount of the claims dollars.

Approximately 86% of all F.L.A. payments were made to the claimant's spouse, children or parents; 11% was paid to brothers and sisters and 3% to grandparents. On average, 8.7% of the claimants had family law claims. In approximately three-quarters of these claims, the payments were shared by no more than two relatives.

The statistical evidence does not suggest excessive cost associated with F.L.R.A. or F.L.A. claims. Nor does it suggest that the assertion of trivial claims by numerous relatives is widespread. Even the survey data, dealing as they do with claims files closed during 1986, may overstate expected future loss costs attributable to the guidance, care and companionship part of the F.L.R.A. claims payments. The claims survey does not take account of the impact of two recent developments, one procedural, the other substantive, which should reduce both the number of F.L.A. claimants and the amount of awards for loss of guidance, care and companionship.

The procedural change is that the prohibition in the F.L.R.A. against bringing more than one action in respect of the same occurrence was eliminated.[17] In an action under section 60 of the former statute the plaintiff was required in his statement of claim to name and join the claim of any other person who was entitled to maintain an action. The plaintiff was further required to file an affidavit with the statement of claim stating that the persons named were the only persons entitled to claim damages under section 60.[18] These former procedural provisions had the practical effect of encouraging claims of a relatively minor nature. Solicitors were obligated to make inquiries of relatives to ascertain whether they wished to assert a claim. As a matter of prudence, solicitors named these relatives and sought confirming instructions later.[19]

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[17] Subsection 60(4).

Under the new F.L.A., any relative with a claim must bring his or her own action. The likely effect is that trivial claims are not made. The relatively large transaction costs associated with these claims are significantly reduced.

The substantive change in claims for loss of guidance, care and companionship comes from two decisions of the Ontario Court of Appeal which have served to moderate these claims. In Nielsen v. Kaufmann,[20] the Court, while rejecting the notion of "conventional" awards for loss of guidance, care and companionship,[21] stressed that there had to be an actual loss. The Court stated:

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[18] Section 62.

[19] See Donaldson v. Piron, 41 C.P.C. 92.

[20] 54 O.R. (2d) 189.

> Although essentially non-pecuniary in character, there must be an actual loss of care, companionship and guidance. A brother of a deceased, for example, who lives in Vancouver and who has not seen the deceased, who lives in Toronto, for 20 years, although they exchange Christmas cards and a telephone call a year, would not, in our view, be entitled to any compensation. Undoubtedly, there would be grief and sorrow and a sense of loss but, under the circumstances recited, there would be no loss compensable under the section. This is not to minimize the importance of the section but, as we have stated, the mere fact of the relationship does not, of itself, establish the right to some compensation.

In Reidy v. McLeod,[22] the trial judge awarded damages of $111,500 to eight members of the family of one deceased and $93,000 to six members of the family of the other deceased. The Court of Appeal reduced each of the aggregate awards to $40,000. In the one instance, the claims of five relatives were dismissed and, in the other instance, the claims of four relatives were dismissed. In the reasons of the Court is the following passage:

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[21] The Court said:

> In time, there may be awards for the loss of care, guidance and companionship in the 'average' family which will come to be recognized as 'conventional'. It is difficult now to see how such a family can be discovered or described.

Compare Gervais v. Richard, 48 O.R. (2d) 191 where Krever, J. said:

> In my view awards for loss of guidance, care and companionship ... must essentially become conventional awards.

[22] 54 O.R. (2d) 661, reversing 47 O.R. (2d) 313.

> In the present case, there can be no question of the enormous grief and mental anguish suffered by the parents and brothers and sisters of the deceased boys. But losses of this kind are non-compensable. Details of the quality of family life and the relationship of family members do not in themselves form a basis of recovery under s. 60; they are significant only in so far as they furnish an evidentiary foundation for assessing compensation for the loss of care, guidance and companionship that will likely be suffered by reason of the death. This assessment must be made in as objective and unemotional a manner as possible in these sad cases.[23]

The social policy underlying section 61 is a sensible one. As Mr. Justice Robins said in Mason v. Peters, section 61 of the F.L.A.:

> evidences the Legislature's intention to accord greater recognition to the interest in family relations and provide greater protection against wrongful disturbance or destruction of that advantageous relationship.[24]

In light of the empirical evidence and the recent changes in the law, both legislative and judicial, I do not think a case has been made to amend subsection 61(2)(e) of the F.L.A.

Before leaving the subject, I wish to comment on the recommendations in the O.L.R.C. Report. The Commissioners, with one dissenting voice, are of the view that all recovery for loss consequent upon an injury be channelled through the injured person or his estate.[25] The O.L.R.C. Report recommends abolishing third party claims for guidance, care and companionship and replacing these claims, in both fatal and non-fatal cases, with a first party claim for loss of capacity to provide guidance and care (but not companionship). The majority of the Commissioners concluded that the claim should be viewed from the perspective of the injured person's capacity to provide guidance and care. The Report also recommends restricting the class of claimants to spouses, dependant children and dependant parents. One Commissioner in dissenting from these recommendations proposed that the current provisions remain intact.

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[23] At p. 662.

[24] Mason v. Peters, at p. 37.

The current statutory scheme is based on the principle that certain family members experience a real loss, not always pecuniary in nature, upon the injury or death of a relative for which an award of damages is justified. The recommendations of the O.L.R.C. are premised on the notion that compensation for care and guidance should be measured by the extent to which the injured person's (or deceased's) capacity to provide care and guidance has been reduced (or eliminated). I would go further than the dissenting Commissioner who concluded that neither principle has any more validity than the other. It seems to me the principles underlying the awarding of compensation for guidance, care and companionship as set forth in the F.L.A. are on balance to be preferred to those underlying the O.L.R.C. majority recommendation.

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[25] See Ontario Law Reform Commission, Report on Compensation for Personal Injuries and Death, Vol. I (Toronto, Ontario: Ministry of the Attorney General, 1987), pp. 65-82. [Henceforth: O.L.R.C., Report, Vol. I (1987)] and Dissent by Margaret A. Ross, pp. 160-171.

Claims survey data lead to the conclusion that changes cannot be justified on a cost basis. Nor do I think that the concern about nuisance claims or the possibility of multiple actions justifies abolishing or substantially changing section 61, particularly having regard to the procedural change under the new Act and the recent case law. Further, although the O.L.R.C. recommendation would mean only one action, the proposed assessment, notice, apportionment and distribution procedures are far more cumbersome than the existing system which permits separate claims, but usually involves only one action.

Finally, the proposal to eliminate claims for loss of "companionship" is, in my view, not warranted. There is now an established jurisprudence dealing with the phrase "guidance, care and companionship" and I am not persuaded that there is anything to be gained by removing one component of that phrase. A principal reason for the Commission's recommendation was to reduce or eliminate entirely the need to investigate the nature of the relationship between the injured or deceased and the person to whom care and guidance was provided. As I view it, even under the O.L.R.C.'s proposals, there will be a need for that inquiry, however unfortunate or distasteful it may be in some cases.

C. PREJUDGMENT INTEREST

In Ontario, prior to 1977, there was no statutory provision for prejudgment interest.[26] Absent such a provision, defendants had a disincentive to settle litigation and a corresponding incentive to delay the trial of an action as long as possible.[27]

The situation was rectified by amendments to the Judicature Act effective November 25, 1977.[28] The current provision for prejudgment interest is found in section 138 of the Courts of Justice Act[29] which states as follows:

> **Prejudgment interest**
> 138(1) A person who is entitled to an order for the payment of money is entitled to claim and have included in the order an award of interest thereon at the prejudgment rate, calculated,
> (a) where the order is made on a liquidated claim, from the date the cause of action arose to the date of the order; or
> (b) where the order is made on an unliquidated claim, from the date the person entitled gave notice in writing of his claim to the person liable therefor to the date of the order.

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[26] At common law, a defendant was not required to pay interest on damages that had accrued to the time of trial. See Waddams, The Law of Damages (1983), pp. 495-6.

[27] Even post-judgment interest was only payable at the 5% statutory rate provided for in the Interest Act, R.S.C. 1970, c. I-18. This gave defendant insurers an incentive to appeal an award because they could obtain a rate of return more than 5% on the large sums of money which would inevitably be paid.

[28] S.O. 1977, c. 51.

[29] S.O. 1984, c. 11.

Special damages

(2) Where the order includes an amount for special damages, the interest calculated under subsection (1) shall be calculated on the balance of special damages incurred as totalled at the end of each six-month period following the notice in writing referred to in clause (1)(b) and at the date of the order.

Exclusion

(3) Interest shall not be awarded under subsection (1),

(a) on exemplary or punitive damages;
(b) on interest accruing under this section;
(c) on an award of costs in the proceeding;
(d) on that part of the order that represents pecuniary loss arising after the date of the order and that is identified by a finding of the court;
(e) where the order is made on consent, except by consent of the debtor; or
(f) where interest is payable by a right other than under this section. R.S.O. 1980, c. 223, s. 36.

Application

(4) Where a proceeding is commenced before this section comes into force, this section does not apply and section 36 of the Judicature Act, being chapter 223 of the Revised Statutes of Ontario, 1980, continues to apply, notwithstanding section 187.

The prejudgment interest rate as defined in section 137(1)(d) means:

> the bank rate at the end of the first day of the last month of the quarter preceding the quarter in which the proceeding was commenced, rounded to the next higher whole number where the bank rate includes a fraction, plus one percent.[30]

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[30] The main difference between the interest provisions of the Judicature Act and the Courts of Justice Act is that the present statute uses the bank rate whereas the former statute used the prime rate. There was a practical difficulty in using the prime rate because the Bank of Canada Review is not published until some time after the prime rate is set. The bank rate can be determined immediately.

The Court also has a discretion to vary or disallow prejudgment interest in appropriate circumstances. Section 140 of the Courts of Justice Act provides:

> 140. The court may, where it considers it just to do so, having regard to changes in market interest rates, the circumstances of the case, the conduct of the proceeding or any other relevant consideration,
> (a) disallow interest under section 138 or 139;
> (b) allow interest at a rate higher or lower than that provided in section 138 or 139;
> (c) allow interest for a period other than that provided in section 138 or 139,
> in respect of the whole or any part of the amount on which interest is payable under section 138 or 139. R.S.O. 1980, c. 223, ss. 36(6), 37(2).[31]

Prejudgment interest was introduced to encourage early settlement and payment of claims.[32] Some insurers now argue that the pendulum has swung the other way, from delays by defendants to delays by plaintiffs. They complain that the present prejudgment interest provisions give plaintiffs a disincentive to early settlement. Insurers also complain they are required to pay prejudgment interest, even for the period when they did not have sufficient medical information to evaluate or pay the claim itself or even to make a settlement offer. It was with these concerns in mind that the C.B.A.O., among others, recommended that, in actions involving bodily injury, prejudgment interest with respect to non-pecuniary losses should not commence until the plaintiff has disclosed to the defendant or his insurer the extent and nature of the injuries sustained.[33] In the alternative, the C.B.A.O. recommended that prejudgment interest not commence until the plaintiff had agreed to make himself available for a medical examination on reasonable notice.[34] These recommendations were adopted by the Ontario Task Force on Insurance in a somewhat qualified way having in mind the comments which appear at page 59 of the Task Force Report.[35]

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[31] S.O. 1984, c. 11, s. 140. The bank rate is defined in section 137(1)(a) as: "the bank rate established by the Bank of Canada as the minimum rate at which the Bank of Canada makes short-term advances to the chartered banks".

[32] See Spencer v. Rosati, 50 O.R. (2d) 661 at 665 (per Morden, J.A.).

One cannot consider legislative changes to the prejudgment interest provisions of the Courts of Justice Act without first considering what purpose should be served by prejudgment interest. There are two possibilities; one is to compensate the plaintiff; the other is to provide an incentive to settlement.[36]

The compensation rationale for prejudgment interest is based on the guiding principle which governs the measure of damages in tort law; the victim should be restored as far as money can do to the position he or she would have been in if the tort had not been committed. Full application of that principle requires that the plaintiff be compensated for the loss of use and loss of value of a monetary award until such time as it is paid.[37]

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[33] See C.B.A.O. submission to the Minister of Financial Institutions in response to the Report of the Ontario Task Force on Insurance (July 30, 1986) Appendix B, pp. 7-12.

[34] See C.B.A.O. Submission. Insurers also argue that the delays exacerbate their difficulties in setting reserves.

[35] See the Ontario Task Force on Insurance, Final Report (1986), p. 59.

[36] See Bruce Feldthusen, Research Paper, prepared for the O.L.R.C. Project on Compensation (1987). A third possibility is that prejudgment interest is for payment of a just debt improperly withheld. See e.g., Toronto Railway Company v. Corporation of the City of Toronto, [1906] A.C. 117 at 120. But this objective can only be subsidiary to the compensation objective.

I consider that compensation of the victim should be the main objective of prejudgment interest. As a general proposition, once it is accepted that the main purpose of prejudgment interest is compensation, then the interest provisions themselves should have a neutral effect on incentives to settle, favouring neither plaintiffs nor defendants.[38] I recognize that prejudgment interest was first introduced in order to promote early settlement or to discourage delay by insurers. I do not believe that the settlement incentive purpose should dominate, nor do I think it should be ignored. Unreasonable delays in the delivery of medical information, for example, should be dealt with by the exercise of the court's discretion as to costs and its discretion to vary or disallow prejudgment interest under section 140 of the Courts of Justice Act.

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[37] Equally, the defendant has had the use of the money over that period. In Riches v. Westminster Bank Limited, [1947] A.C. 390, Lord Wright stated at 400:

> The essence of interest is that it is a payment which becomes due because the creditor has not had his money at the due date. It may be regarded either as representing the profit he might have made if he had the use of the money, or conversely the loss he suffered because he had not that use. The general idea is that he is entitled to compensation for the deprivation.

[38] See O.L.R.C., Report, Vol. II (1987), p. 460.

With these principles in mind, I turn now to the specific elements of an award of prejudgment interest:

(a) The Date From Which Interest Runs

Section 138 provides that prejudgment interest on a liquidated claim runs from the date the cause of action arose; on an unliquidated claim prejudgment interest runs only from the date the person entitled gave notice in writing of his claim to the person liable.[39] If the primary purpose of prejudgment interest is to compensate, then the date when notice in writing was given is of no significance. I recommend that in the case of both liquidated and unliquidated damages, prejudgment interest in respect of personal injury awards should be assessed from the date of loss -- the date the cause of action arose. A similar recommendation has been made by the O.L.R.C.[40] Further, prejudgment interest payable in circumstances where SEF 44 underinsured coverage is responding to the claim should run from the date of loss rather than from the date of notification as is now provided in the SEF 44 endorsement. So long as the SEF 44 endorsement remains optional, this recommendation is something which should be discussed with the insurance industry.

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[39] The existing provision is designed to induce timely claims.

[40] See O.L.R.C. Report, Vol. II (1987), pp. 463-4.

(b) Simple or Compound Interest

Section 138(3)(b) of the Courts of Justice Act excludes compound interest. The exclusion is inappropriate. If the victim had the money, he or she could have invested it and thereby earned compound interest. While the defendant holds the money, compound interest is likely to be earned. Compound interest, in the words of the British Columbia Law Reform Commission, "reflects more accurately the operation of the marketplace and more fully and accurately measures the cost of delay to the successful plaintiff".[41] Accordingly, I recommend that section 138 of the Courts of Justice Act be amended to permit compound interest, calculated at quarterly intervals, to be awarded. This recommendation also has been made by the O.L.R.C.[42]

(c) Rate of Interest

The prejudgment interest rate is 1% above the bank rate. Some insurers argue that this rate is too high because of the restrictions on the type of investments they may make. The prejudgment interest rate is roughly equal to the rate charged prime corporate borrowers, but below the borrowing rate for individuals. The defendant has the use of funds that will be awarded from the date of the accident to the date of the judgment and, if the defendant makes short-term investments prior to judgment, the defendant will likely earn a rate of return in the range of 2% less than the prejudgment interest rate. To that extent, the defendant is disadvantaged. But victims who must borrow in order to meet expenses caused by the accident are also disadvantaged as are victims who could earn greater than the prejudgment interest rate on riskier investments.[43] On the other hand, the current prejudgment interest rate is generally higher than the rate of return that can be earned by individuals on short-term investments. To that extent, some plaintiffs who have not borrowed may be overcompensated. No formula can precisely cover each individual case. The O.L.R.C. Report has recommended that the appropriate prejudgment interest rate should be the average bank rate. I think that is a reasonable compromise.[44] On the whole, it is neutral as between plaintiffs and defendants. The O.L.R.C. has also recommended that the prejudgment interest rate should be adjusted quarterly,[45] and that a fractional rate should be rounded, either up or down, to the nearest tenth of a point (rather than rounding up to the next full point which is the present requirement).[46] Both of these recommendations are sensible and I endorse them.

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[41] Law Reform Commission of British Columbia, Report on the Court Order Interest Act, (Vancouver: The Commission, 1987), p. 31.

[42] See O.L.R.C., Report, Vol. II (1987), pp. 468-9.

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[43] See Rea, An Economic Perspective.

[44] O.L.R.C., Report, Vol. II (1987), pp. 465-7.

[45] In cases where the rate has varied over a wide range in the period of entitlement to prejudgment interest, trial judges have averaged the rate. Provided there is sufficient reason, the Court of Appeal has approved the practice. See Borland v. Muttersbach, 49 O.R. (2d) 145 (trial); 53 O.R. (2d) 129 (C.A.); Dugdale v. Boissneau (1983), 41 O.R. (2d) 152 (C.A.); Howes v. Crosby (1984), 45 O.R. (2d) 449.

[46] O.L.R.C., Report, Vol. II (1987), pp. 467-8.

(d) Interest Rate on Non-Pecuniary Damages

The market rate of interest reflects two components: the rental value of money (the real rate of return) and the declining purchasing power of money (the inflation rate of return).[47] Some have argued that to allow interest on non-pecuniary damages at the statutory prejudgment interest rate overcompensates the plaintiff. The argument is applicable in all cases but is invariably made in the context of catastrophic loss cases.

In 1978, the Supreme Court of Canada established a rough upper limit of $100,000 for non-pecuniary damages.[48] Three years later in Lindal v. Lindal,[49] the Supreme Court of Canada accepted the proposition that the $100,000 was subject to increase due to inflation. With the declining purchasing power of the dollar, the current rough upper limit is approximately $195,000. Therefore, if a court awards a victim $195,000 for an accident which took place in 1978 and also awards interest on that sum from 1978 at the prejudgment interest rate, it is suggested that the victim is being compensated twice for inflation or for the eroding value of money. Trial judges have taken different positions on this issue. The double counting argument was accepted by Mr. Justice R.E. Holland in Graham v. Persyko[50] where he reduced the rate of prejudgment interest on the non-pecuniary damage portion of the award to 2.5%. In the subsequent case of Borland v. Muttersbach,[51] Mr. Justice Barr rejected the approach of Mr. Justice R.E. Holland and awarded prejudgment interest on non-pecuniary damages at the statutory rate. The Court of Appeal did not interfere with the decision of Mr. Justice Barr on this point.[52] Then in DeChamplain v.

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[47] In addition to loss of use and loss of value associated with inflation, economists suggest minor cost factors (e.g., administrative costs) influence interest rates. See Posner, Economic Analysis of Law (1977), p. 147.

[48] See Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229, etc.

[49] (1981), 129 D.L.R. (3d) 263. Dickson, J. selected as the date of measurement January 19, 1978 which was the date of the Court's judgment in the Trilogy.

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[50] (1984), 30 C.C.L.T. 85 where R.E. Holland, J. stated:

> It is clear, however, that my assessment carries an element of inflation with it. It is above the old upper limit. In these circumstances the award of $125,000 will bear interest at only two and a half percent from February 23, 1981 to the date of judgment.

[51] Borland v. Muttersbach, supra.

[52] A separate argument made in Borland v. Muttersbach and also in Spencer v. Rosati was that non-pecuniary damages in cases of serious personal injuries are designed at least in part to provide solace in the future and to that extent are damages for future pecuniary loss which should not bear prejudgment interest. The argument was rejected by the Court of Appeal for the following reasons:

> ...we think that this introduces an unnecessary complexity into the determination of interest which is at odds with the terms of the legislation. Even if part of a judgment for non-pecuniary loss is notionally to cover the future our law requires a single, once and for all, payment to be made now. We see no warrant for extending judicially the policy set forth in s. 36(5)(d) respecting future pecuniary loss.

(See Spencer v. Rosati, supra, per Morden, J.A. at 665, 666).

Etobicoke General Hospital,[53] Mr. Justice Montgomery took a third approach. He awarded the full prejudgment interest rate on the first $100,000 and 2.5% on that part of the general damage award that exceeded $100,000 due to inflation. He rejected the approach of Mr. Justice R.E. Holland as undercompensation and that of Mr. Justice Barr as overcompensation.

While any number of policy considerations may be brought to bear on this issue,[54] I consider that the central policy should be to provide full compensation to the victim, but not to overcompensate him. I also consider that whatever rule is adopted, it should apply to the less serious injury cases as well as to the catastrophic cases.

The first matter to be addressed then is whether there is overcompensation when the full prejudgment interest rate is awarded on the non-pecuniary damage portion of an award. The issue can be considered by first looking at the matter in historical terms. For the purpose of analysis, we can take the example of a catastrophically injured victim. That person would be entitled to $100,000 plus the inflation add on from January 19, 1978 to the date of the accident. That total amount should bear interest at the full prejudgment interest rate from the date of the accident until judgment because the plaintiff is entitled to the money as of the date of the accident. Were the courts to make awards in terms of historical prices[55] then the proper measure of compensation would be achieved by applying the statutory rate to the award. However, such an exercise would be impractical and unrealistic, especially in less serious cases. Judges and juries and, more importantly, those settling cases cannot be asked to roll back the clock in assessing non-pecuniary damages. 1988 assessments of non-pecuniary damages will be assessed in 1988 dollars regardless of the date of the accident.

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[53] (1985), 34 C.C.L.T. 89.

[54] See J.R. Morse, "Pre-judgment Interest: Entitlement to and the Rate on Non-Pecuniary General Damages in the Amount of the Rough Upper Limit Plus Inflation," Advocates' Qtly. 7 (1986-87): 337.

Assessing non-pecuniary general damages in current dollars is consistent with the principle in Lindal and reflects the impact of inflation from the time of the accident to the time of judgment. Therefore, to award the statutory rate on the award for non-pecuniary general damages from the date of the accident overcompensates the plaintiff. The amount to which the plaintiff was entitled at the time of the accident has been inflated twice, once by the impact of the Lindal principle and again by the impact of that portion of the prejudgment interest rate attributable to the declining value of money.

As I view it, in order to avoid overcompensation, it is more appropriate to award prejudgment interest on the non-pecuniary damage component of an award at the "real rate of return", which is the difference between the market rate of interest (which can be taken to be the prejudgment interest rate) and the inflation rate. While not perfect, this rule will best approximate the proper measure of prejudgment interest compensation for plaintiffs.[56] In cases where this rule does not produce a fair result, it will always be open to the trial judge to vary the award under section 140 of the Courts of Justice Act.

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[55] That is the value of an award at the time the cause of action arose (the date of the accident).

The next issue is whether such a rule is workable in less serious cases, having in mind that non-pecuniary damages are not to be assessed on a sliding scale.[57] The Ontario Court of Appeal has directed that trial judges are not to use the catastrophic injury case upper limit as a point from which non-pecuniary general damages of less seriously injured victims are scaled down. I think I can say with some confidence that trial judges conscientiously seek to apply this direction, as difficult as it may be to do so in practice. Even so, damage assessments in less serious cases are generally made with current dollar values in mind, and therefore implicitly carry an adjustment for inflation.[58] While the exercise is less precise than in the catastrophic case, I am of the view that the rule I propose is still fair in the non-catastrophic cases.

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[56] It could be argued that even this rule produces slight overcompensation. To use an example, assume a catastrophic accident took place in 1978 and was settled in 1983. Assume further the statutory interest rate in each year was 10% made up of a 7% inflation rate and a 3% real rate. If the plaintiff received $100,000 in 1978, that sum would be worth $150,000 in 1983. On the Lindal principle, the $100,000 award inflated to 1983 dollars would be $135,000. Therefore, if 3% is given on $135,000 from 1978 to 1983 the amount increases to approximately $155,000.

[57] Mulroy v. Aquascene (1982), 36 O.R. (2d) 653 (C.A.); Howes v. Crosby, supra.

[58] See R.E. Holland, J. in Graham v. Persyko, supra at p. 12. In Mitchell v. Mulholland (No. 2), [1971] 2 W.L.R. 1271 (C.A.), Widgery, L.J. said at 1284:

Finally, there is the matter of the appropriate rate of interest. The O.L.R.C., which has also recommended using the real rate of return on damages for non-pecuniary loss, has proposed 2.5% which is the same rate as the discount rate prescribed in Rule 53.09.[59] The discount rate is used to calculate the present value of future pecuniary loss. The figure of 2.5% is one which reflects the long-term historical difference between the market rate and the inflation rate. A long-term rate is appropriate for discounting long-term future pecuniary loss. In my view, 2.5% is not appropriate for a prejudgment interest rate which will generally be applied for relatively shorter periods of time. Over the past decade the real rate of return has been in the range of

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> No one doubts that an award of damages must reflect the value of a pound sterling at the date of the award and conventional sums attributed to, say, the loss of an eye, have been adjusted upwards in recent years on that account. Inflation which has reduced the value of money at the date of the award must, thus, be taken into account.

[59] One of the Ontario Law Reform Commissioners, Earl Cherniak, dissented. In his view, there was no empirical evidence to suggest that awards less than the maximum were adjusted for inflation. He suggested that the experience of most counsel who practised in the area was to the contrary. As a middle ground he proposed:

(1) prejudgment interest for non-pecuniary damages at 2.5% only on the maximum award; and

(2) in all other cases, the formula used by Montgomery, J. in De Champlain v. Etobicoke General Hospital.

3.5 to 4%. It would, in my opinion, be reasonable to use a prejudgment interest rate in this range with provision that the rate be reviewed every four or five years to keep the rate in contact with relatively short-term reality. An alternative approach would be to publish the real rate of return annually and to use the annual figure in calculating prejudgment interest on non-pecuniary general damages.

Accordingly, I recommend that section 138 of the Courts of Justice Act be amended to provide that the non-pecuniary damage component of an award bear interest at the real rate of return and if a specified rate is used it should be in the range of 3.5 to 4% with provision for periodic review by the Rules Committee. I note that Alberta has adopted the same approach. There the legislated rate is 4%.[60] England as well has taken this approach.[61]

D. THE DISCOUNT RATE

In Ontario motor vehicle accident cases, damages for future pecuniary loss (whether for loss of future earnings or cost of future care) are generally awarded as a lump sum.[62] The court assumes that any lump sum award will be invested and earn interest from the date of receipt. If the court were simply to award the plaintiff a lump sum equal to his total future damages, the plaintiff would be overcompensated. Instead, the lump sum award has to be discounted to reflect the fact that the unused portion is capable of earning interest (or profits). Put another way, the time value of money must be taken into account.

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[60] See Judgment Interest Act, S.A. 1984, c. J-O-5, s. 4(1).

[61] See Wright v. British Railways Board, [1983] 2 A.C. 733. See also Pickett v. British Rail Engineering Ltd., [1980] A.C. 136 and Birkett v. Hayes, [1982] 2 All E.R. 710 per Lord Denning.

[62] Periodic payments can only be made on the consent of the parties under s. 129 of the Courts of Justice Act.

In the Trilogy, the Supreme Court of Canada held that in order to avoid undercompensating the plaintiff the impact of inflation had to be taken into account in calculating the discount rate.[63] The Court indicated that the appropriate discount rate was the difference between the market (or nominal) rate of return on long-term investments and the projected long-term inflation rate or, in other words, the real rate of return. In Andrews, the Court used a discount rate of 7% to calculate the present value of the award for future pecuniary loss but said "the result in future cases will depend upon the evidence adduced in those cases".[64] That approach required expert economic evidence in every case on projected future inflation and interest rates and had the effect of increasing the time and expense of personal injury litigation.

To eliminate what was largely an unnecessary exercise,[65] the Ontario Rules of Practice were amended in 1980 to provide a legislated discount rate of 2.5%.[66] The current provision is found in Rule 53.09 and provides as follows:

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[63] Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229 at 254-259.

[64] Andrews v. Grand & Toy Alberta Ltd., p. 259.

> 53.09 The discount rate to be used in determining the amount of an award in respect of future pecuniary damages, to the extent that it reflects the difference between estimated investment and price inflation rates, is 2.5 percent per year.

This rule was intended to reflect the historical difference between the nominal rate of interest on long-term investments and the rate of inflation. The Committee considering the discount rate issue concluded that over the 50 years preceding 1980 a 2.5% discount rate accurately reflected the long-term real rate of return.

Despite the language of Rule 53.09 and its predecessor, courts have on occasion departed from the specified rate.[67] In my view, this serves to undermine the very purpose of a fixed rate. I endorse the following observations by O'Leary, J. in Crew v. Nicholson:[68]

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[65] Rea, "Inflation, Taxation and Damage Assessment," Can. Bar Rev. 58 (1980): 280.

[66] Supreme Court of Ontario Rules of Practice, R.R.O. 1980, Reg. 540, Rule 267a. The rule was enacted following a recommendation by a special committee. See Report to the Committee of the Supreme Court of Ontario on Fixing Capitalization Rates in Damage Actions (February 1980).

[67] See, for example, McDermid v. The Queen (1985), 53 O.R. (2d) 495, where the Court departed from the rule and applied a different discount rate because the evidence indicated that the short-term real rate of interest was substantially higher than 2.5%. In Davies v. Robertson, 5 O.A.C. 393 a rate of 2% was used since it was intended to reflect productivity and accordingly was not a departure from Rule 53.09.

> For the Court to adopt a discount rate other than two and a half percent is to invite a return to the same kind of speculation that existed before Rule 53.09 and its predecessor was introduced. The drafters of the rule knew it would not always accurately reflect the real return on capital over certain periods. It will always be possible to show that for a period in the past the 2.5% rate has not been accurate, and so to predict that it is unlikely to be accurate for some period in the future. That kind of speculation and uncertainty the rule was designed to eliminate.

While I think Rule 53.09 should be applied in every case, and while at present there is nothing to suggest a rate other than 2.5%, it seems to me it would be useful if a mechanism were in place to review the appropriateness of the discount rate from time to time. I note that the O.L.R.C. has recommended regular review of the discount rate by the Rules Committee at least every four years.[69] Given that the discount rate is intended to be a long-term rate, review every four years may be unnecessarily frequent. On the other hand, review at relatively short intervals might lend legitimacy and credibility to the rate that is actually used and therefore provide a disincentive to litigants to lead evidence as to a different rate in a particular case.

E. GROSS-UP, STRUCTURED SETTLEMENTS, PERIODIC PAYMENTS

Lump sum awards for future care costs and pecuniary losses of dependants in fatal accident cases have to be increased to take into account the impact of taxation.[70] This exercise is referred to as gross-up. If future care costs were paid periodically as incurred, gross-up would not be a factor. Gross-up is necessary only because compensation is made on a lump sum basis, and income generated by the investment of the lump sum is taxed. In fatal accidents, a dependant's pecuniary loss is determined by the deceased's after-tax income. Awards of damages for pecuniary loss in fatal accident cases must therefore be grossed up to ensure that full compensation is achieved.

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[68] (1987 unreported).

[69] O.L.R.C., Report, Vol. II (1987), p. 510.

The Trilogy[71] (particularly Andrews and Thornton) established the basis upon which future care costs in personal injury cases are to be assessed. The compensation model for future care costs involves an assessment of the injured plaintiff's future care requirements. These are determined by estimating the plaintiff's reasonable future care costs; the estimate is made without regard to any other resources the plaintiff may have available to meet those costs.

Two recent cases, Davies v. Robertson[72] and McErlean

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[70] In Fenn v. City of Peterborough (1979), 25 O.R. (2d) 399, the Ontario Court of Appeal first recognized the impact of taxation on the capital sum established for future care costs.

[71] Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229; Thornton v. Board of School Trustees of School District No. 57, [1978] 2 S.C.R. 267; Arnold v. Teno, [1978] 2 S.C.R. 287.

[72] (1984), 5 O.A.C. 393 (Ont. C.A.).

v. Sarel and the Corporation of the City of Brampton[73] illustrate the complexity of the gross-up calculation and the significance of the additional lump sum payment required to accommodate the concept of gross-up. The Ontario courts now consistently recognize that the fund established as compensation for future care costs in injury cases and for pecuniary losses in fatal accident cases will not be sufficient if the impact of taxation is not taken into account.[74] There is no uncertainty about this. The goal of full compensation cannot be achieved in lump sum awards of damages without engaging in the complicated exercise of gross-up. As Professor Waddams observed in reference to the Trilogy: "[I]n fact the whole tenor of the judgments is that the plaintiff's actual reasonable pecuniary losses should be fully compensated."[75] If future care costs and pecuniary losses in fatal accident cases are not grossed up, the plaintiff's actual reasonable pecuniary loss will not be fully compensated.

Many submissions to the Inquiry strongly recommend that steps be taken to eliminate the need for gross-up.[76] Two solutions were repeatedly suggested: an amendment to the Income Tax Act (at least for future care costs) and mandatory structured settlements.

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[73] (1985), 32 C.C.L.T. 199 (Ont. H.C.); reversed on appeal (Ont. C.A., 1987, as yet unreported).

[74] Future care compensation and pecuniary losses in fatal accident cases are generally not grossed up in Manitoba and British Columbia, although courts in both provinces recognize the reality of the tax impact on funds established for future care costs in injury cases. See MacDonald v. Alderson, [1982] 3 W.W.R. 385.

[75] S.M. Waddams, "Compensation For Non-Pecuniary Loss: Is There a Case For Legislative Intervention?" Can. Bar Rev. 63 (1985): 734.

An amendment to the Income Tax Act is the best and simplest solution to the gross-up problem; this is unlikely to occur in the near future. I have consulted with officials at the Ministry of Finance and reviewed correspondence with the Minister on this issue. If the issue is to be addressed now, as it should be, it will have to be dealt with outside the perimeters of an Income Tax Act amendment. Nevertheless, I would hope that this issue will be given further consideration by the Minister of Finance.

A structured settlement is a means of paying an agreed future loss on a periodic basis. Revenue Canada's position on structured settlements has been made increasingly clear. Revenue Canada has defined a "structured settlement", and has provided guidelines making approval of structured settlement arrangements, on a case-by-case basis, unnecessary.

Revenue Canada Bulletin IT-365R2[77] defines a structured settlement as follows:

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[76] The I.B.C., C.B.A.O., Advocates' Society, F.A.I.R., all insurers making separate submissions and the Consumers' Association are among those supporting the elimination of gross-up.

[77] May 8, 1987.

> A structured settlement is a means of paying or settling a claim for damages, usually against a casualty insurer, in such a way that amounts paid to the claimant as a result of the settlement are free from tax in the claimant's hands.

Structured settlements have come to be identified with the periodic payment of damages by means of an annuity; the annuity is purchased by the defendant's casualty insurer from a life insurer. Annuity payments flow to the injured plaintiff as tax-free damages. The annuity contract is owned by the casualty insurer, which guarantees payment to the injured person. The increasing popularity of structured settlements is largely attributable to the cost of gross-up. Because periodic annuity payments flowing to the injured plaintiff are non-taxable, gross-up is not an issue.

In the settlement process, gross-up can be a bargaining tool. Although section 129 of the Courts of Justice Act permits the periodic payment of damages (and for that matter a review of damages), consent of "all affected parties" is required.[78] This provides plaintiff's counsel with enormous settlement leverage. For example, if counsel for all affected parties agree that compensation for a catastrophically injured plaintiff's future care costs will require a capital sum of $1,000,000, and that taxation of the investment will require a $500,000 gross-up, counsel may not settle the plaintiff's claim at $1,500,000, but rather agree to a structured settlement in which the gross-up savings of $500,000 is shared between the plaintiff and defendant.

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[78] S.O. 1984, c. 11, s. 129.

In this way, the plaintiff is paid an additional $250,000 (50% of the gross-up). Whether this $250,000 is used to fund enhanced annuity benefits or paid as up-front money is not important. The settlement can be said to be beneficial to both sides. The plaintiff's future care costs have been agreed upon and looked after through the structured settlement, and the plaintiff has also obtained an additional $250,000. At the same time, the defendant's insurer has paid $250,000 less than if the action had proceeded to trial without the plaintiff's consent to a structured settlement. Assuming that future care cost compensation was correctly established in the first place, the plaintiff is overcompensated. Because of this kind of settlement, the true, albeit indirect, cost of gross-up remains obscured.

Although gross-up is central to the structured settlement debate and the prevailing concern about insurance premiums, it is not the only issue. The very definition of a structured settlement raises the issue of periodic versus lump sum payments.

Periodic payment of damages was considered by the Committee on Tort Compensation (the Holland Committee) in 1980.[79] This Committee was established by the Chief Justice of Ontario as a result of the observations of Mr. Justice Dickson in Andrews v. Grand & Toy.[80] In that case, Mr. Justice Dickson questioned the rationality of lump sum payments for future care cost compensation. The Holland Committee counselled caution in proceeding to a periodic payment regime, and recommended what is now known as a structured judgment, but only with the consent of the affected parties. After considering issues such as delay, rehabilitation, the capacity for inflation protection, the potential for dissipation of lump sum awards, O.H.I.P.'s involvement and even the injured plaintiff's sense of well-being and stability, the Committee rejected a periodic payment scheme. At page 24 of the Committee's Report, the following statement appears:

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[79] Law Society of Upper Canada. Committee on Tort Compensation, Report, 1980. (Chairperson: The Hon. Mr. Justice Richard E. Holland). [Henceforth: Holland Committee, Report, (1980)].

[80] [1978] 2 S.C.R. 229.

> For these reasons, we have rejected any general scheme of variable periodic payments that would be imposed on the parties against their will. However, we see no objection to the entering of a reviewable judgment on consent of the parties as has, in fact, been done in the past.

The Committee's recommendations led to what is now section 129 of the Courts of Justice Act. Section 129 provides:

> In a proceeding where damages are claimed,
>
> (a) for personal injuries; or
>
> (b) under Part V of the Family Law Reform Act, for loss resulting from the injury to or death of a person, the court may, with the consent of all affected parties,
>
> (c) order the defendant to pay all or part of the award for damages periodically on such terms as the court considers just;
>
> (d) order that the award for damages be subject to future review and revision in such circumstances and on such terms as the court considers just.

Because section 129 permits structured judgments, most view the section as a progressive step. Section 129 did not resolve the problem of gross-up or silence the debate about the relative wisdom of lump sum and reviewable periodic payment compensation schemes. The practical problem in section 129 is the need for consent.

The vast majority of submissions to the Inquiry were against gross-up, and most regarded the structured settlement as a convenient device through which gross-up could be avoided. Many academics seem to be less enthusiastic about structured settlements, partly because structures do not resolve the central issue - the availability of reviewable periodic payments particularly for future care costs.

Because a structured settlement involves the periodic payment of compensation, the issue of structured settlements often becomes merged with arguments in favour or against periodic payment of damages. The common law lump sum payment of compensation has many drawbacks. Chief among them is the difficulty of establishing with precision what amount of compensation will be required, perhaps years in the future. My mandate deals with compensation within a relatively narrow area, motor vehicle accidents, and it would be inappropriate for me to address the broad issue of lump sum versus periodic payments of compensation. Nevertheless, I think it is essential that the problem of the cost of gross-up be addressed; one way is through the use of a structured settlement.

There are other alternatives. Damages may be paid by insurers on a periodic basis. Professor Bale has proposed establishing a tort fund to accommodate periodic payments in the area of future care.[81] This fund would be established by the provincial government. Future care compensation would be deposited in the fund and paid out as the injured persons's future care needs arose. Future care costs would be subject to review. Gross-up would not be a factor as the fund would be government-run.

Professor Bale's proposal has much to recommend it, at least from the standpoint of avoiding gross-up, but some problems remain. First, in practical terms, a tort fund solution could not be implemented for years. Extensive consultation with the insurance industry, consumers' groups and the Bar would be required. Given the public's legitimate concern about automobile insurance premiums, a more immediate solution is required. Second, the tort fund concept involves the periodic reviewable payment of damages. A number of problems connected with establishing a review mechanism would have to be considered. Third, the tort fund requires an additional layer of government bureaucracy and this will inevitably be costly. The tort fund concept should be given further thought and study, but it is at best a long-term solution to a problem which requires immediate attention.

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[81] G. Bale, Cost of Future Care, Periodic Payments, Structured Settlements, Discounting, Taxation and Gross Up, Prepared for the O.L.R.C. Project on Compensation (1987); "Encouraging the Hearse Horse Not to Snicker: A Tort Fund Providing Variable Periodic Payments for Pecuniary Loss," in Issues in Tort Law/eds. F.M. Steel and S. Rogers-Magnet (Toronto: Carswell, 1983), p. 91.

A structured settlement has certain identifiable advantages over a pure lump sum future loss payment which is to be invested at a predetermined interest rate, usually 2.5%.[82] The benefits of a structured settlement are:

(a) Elimination of gross-up on pecuniary damages in fatal accident cases, and in compensation for future care in personal injury cases.

(b) Elimination of the plaintiff's investment risk; the annuity carrier assumes that risk.

(c) Elimination of the need to consider investment management costs as a separate issue; management fees become a non-issue.

(d) The annuity carrier assumes the risk that the plaintiff will live longer than the plaintiff's predicted, albeit impaired, life expectancy. Undercompensation because of longevity becomes a non-issue. This benefit applies to future care cost compensation.

(e) Although the plaintiff may dissipate annuity payments as they are received, dissipation of the capital sum is impossible if the settlement or judgment is structured. The likelihood of the state assuming responsibility for the plaintiff is diminished.

(f) The plaintiff's anticipated future needs can be taken into account in establishing the pay-out provisions of the annuity. The structure allows for flexibility both in the amount of individual payments and in their timing. While this flexibility exists, it ends once the annuity contract has been established.

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[82] This is the discount rate established by Rule 53.09.

(g) The amount of each periodic payment is established at the time of settlement. Their payment is certain; this is a stabilizing factor in the plaintiff's life.

(h) The injured plaintiff can participate in establishing the scheme through which his future care costs will be paid. A plaintiff entitled to pecuniary relief in a fatal accident case can also participate in establishing the structure.

(i) Inflation protection can (and should) be built into the annuity contract.

There are disadvantages. They include the following:

(a) Although the structure can be tailored to the expected needs of the plaintiff, future care compensation must be determined at settlement or trial.

(b) There may not be sufficient flexibility to deal with unforeseen expenses. This goes beyond the typical criticism of lump sum payments, namely, that they are not responsive to significant changes in circumstances. At least if a lump sum is available the injured person has the flexibility to encroach on that lump sum. In the case of a structure, that flexibility does not exist.

(c) There is a theoretical financial risk to the plaintiff. However, no life insurer has failed to deliver benefits to a beneficiary since Confederation. The plaintiff also has the benefit of the casualty insurer's guarantee.

(d) Some economists argue that denying lump sum compensation places the plaintiff in a position of economic disadvantage; the plaintiff will take less than full lump sum compensation to avoid periodic payments.[83]

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[83] Samuel A. Rea, "Lump Sum Versus Periodic Damage Awards," J. of Leg. Stud. 10 (1981): 131.

(e) The plaintiff loses flexibility because the annuity contract cannot be assigned, commuted or transferred.

A dominant concern with structured settlements is the uncertainty of the future. One cannot be certain as to how the plaintiff's future care cost requirements will develop, what costs will be incurred and when. It is possible, but not practical, to make the future care needs of an injured plaintiff subject to review. Finality and stability would be sacrificed. Enormous transaction costs would result from any review process. This issue obviously troubled the Holland Committee.[84]

Under the circumstances, I recommend that section 129 of the Courts of Justice Act be amended to provide for mandatory structured judgments at the discretion of the trial judge for future care costs and pecuniary loss in fatal accident cases. As a practical matter this would only apply in cases where the defendants are insured. Just as in the current system, the trial judge or jury will determine the plaintiff's future care costs as part of the required findings of fact. In fatal accident cases, the trial judge will make a finding as to a dependant's future pecuniary loss arising out of death. All affected parties may then give submissions on the structured settlement issue. If the trial judge is satisfied that lump sum compensation without gross-up should be paid, damages can be assessed in the usual way. If the trial judge, in considering the interests of affected parties and the public interest, is persuaded that the consequences of the taxation of a lump sum established for future care cost compensation or for pecuniary loss in fatal accident cases should be recognized, the trial judge may exercise discretion and impose a structured judgment. The parties should be given a reasonable but short period of time, such as 14 days, to consult with experts in structured settlements and, if necessary, with insurers writing impaired life annuities. The parties could then report to the trial judge and make submissions as to the form of the structured judgment for either or both future care costs and pecuniary loss in fatal accident actions. Inflation protection can be built into the annuity contract where appropriate.

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[84] Holland Committee, Report (1980), p. 24.

If these recommendations are not implemented, or are delayed in their implementation, I recommend that in jury trials the gross-up calculation be made by the trial judge rather than the jury, after the jury has made findings of fact as to compensation which would attract gross-up. I do not think juries should be involved in the gross-up exercise. Calculating future losses is a difficult exercise; calculating gross-up is beyond the capacity of most juries.

Alternatively, we should proceed to establish a uniform predetermined basis upon which gross-up would be established.[85] Basic assumptions are made now on a case-by-case basis in the gross-up calculation exercise. If gross-up is to remain with us, I would recommend that a subcommittee of the Rules Committee be struck to develop a uniform method to be used in all relevant cases for the gross-up calculation. This was the approach successfully undertaken in establishing the 2.5% discount rate (Rule 53.09).

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[85] The Court of Appeal both in Nielsen v. Kaufmann 54 O.R. (2d) 189 and in McErlean v. Sarel and Brampton (1987, unreported), suggested legislative reform was needed to achieve a measure of uniformity in the gross-up calculation.

The O.L.R.C. (with one dissent), after careful consideration of the periodic payment issue, recommended that:

> The law in Ontario should not be changed to accommodate a system of reviewable periodic payments that could be ordered by the court without the consent of the parties.[86]

While I agree with the O.L.R.C.'s rejection of the reviewable periodic payment of damages, I am still of the view that future care costs should be subject to periodic payment, in the discretion of the court. As noted by the O.L.R.C., and here, this can be done now, but only on consent.

Rejection of a mechanism for reviewing periodic payment of damages (a rejection I endorse) should not foreclose consideration of the periodic, non-reviewable payment of future care costs; periodic payments provide security and certainty for the injured, eliminate the cost of gross-up and avoid both investment risk and the risk of dissipation. This can be accomplished through a structured settlement. Although the solution is not perfect, it is better and less costly than what we have now.

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[86] O.L.R.C., Report, Vol. II (1987), p. 403.

It is difficult to predict what cost savings will result from the elimination of gross-up. The Inquiry Claims Survey measured the current cost impact of gross-up at 0.4%. This significantly understates the true cost of gross-up. So few large cases proceed to trial that measurement of the cost of gross-up from that perspective is not helpful. The increasing use of structured settlements has masked the real impact of gross-up. There are relatively few claims in which gross-up is a factor, but when it is in issue, the amount of money at stake is significant.

Finally, as a general matter, the premium required to fund a structured settlement for any future loss is now less than the lump sum which has to be established (usually at 2.5%) to provide compensation for that loss. This arises because annuity carriers use an interest rate higher than 2.5% in establishing annuity premiums. What this means is that it costs less to fund a structured settlement (through the payment of an annuity premium) than it does to create a capital sum using the 2.5% discount rate.

Some have suggested that the court should have discretion to impose a structured settlement for loss of future income.[87] However, the arguments in favour of mandatory structured settlements for loss of future income have considerably less force than for future care costs in that gross-up is not a factor as long as we assess future income loss on a before tax basis. I do not, therefore, go so far as to recommend that the court be given a discretion to impose a structured settlement for future income loss.

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[87] The submission of McKellar Structured Settlements Inc., is one example.

F. COLLATERAL BENEFITS

In Boarelli v. Flannigan,[88] the Ontario Court of Appeal decided that collateral benefits should not be taken into account in assessing damages for loss of earnings or earning capacity in personal injury cases.

The rule in Boarelli v. Flannigan, which has come to be known as the collateral source rule, is still the law in Ontario.[89] In Ontario, the collateral source rule covers virtually every collateral benefit, regardless of nature or source and whether or not a statutory right of subrogation exists. Accordingly, welfare benefits, unemployment insurance benefits, private accident insurance benefits and benefits under employee short-and long-term disability programs are all covered. Many have urged change.[90]

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[88] [1973] 3 O.R. 69.

[89] The principle has been approved by the Supreme Court of Canada in two fairly recent cases: Canadian Pacific Ltd. v. Gill, [1973] S.C.R. 654 (CPP benefits) and Guy v. Trizec Equities Ltd., [1979] 2 S.C.R. 756 (private employment pension benefits).

[90] See, for example, C.B.A.O. submission to the Minister of Financial Institutions (July 30, 1986) Appendix B, pp. 17-20; Bruce Feldthusen, Research Paper, For the Ontario Law

The principal argument made against the collateral source rule is that an injured person should not be permitted to recover more than once for the same loss.[91] In order to assess this argument, it is necessary to identify those collateral benefits which, when paid, result in overcompensation if the claimant recovers tort damages. I agree with Professor Feldthusen who draws a distinction between indemnity and non-indemnity payments.[92] An indemnity payment is one which is intended to compensate the insured in whole or in part for a pecuniary loss. Unemployment insurance benefits and employment disability benefits are examples of indemnity payments. A non-indemnity payment is a payment of a previously determined amount upon proof of a specified event, whether or not there has been pecuniary loss. Life insurance, employee retirement benefits and fixed-sum accident benefits are examples of non-indemnity payments. In principle, non-indemnity payments should not be considered in the discussion of the collateral source rule since they do not result in true overcompensation. Indemnity payments, on the other hand, can be clearly identified as duplicating an item of damage claimed from the tortfeasor and accordingly do constitute overcompensation.

Reform Commission Project on Compensation for Personal Injury and Death.

[91] A further argument can be made in terms of loss distribution and reallocation of losses. See O.L.R.C., Report, Vol. II (1987), pp. 423-6.

[92] Feldthusen, Research Paper.

If, in assessing full tort system compensation, the focus is on the plaintiff, the collateral source rule results in substantial overcompensation to Ontario motor vehicle accident victims taken as a group. In the absence of available data,[93] I thought it necessary to attempt to quantify the impact of the collateral source rule on bodily injury loss costs. Two bodily injury claims surveys and a comprehensive simulation dealing with the sources of compensation for motor vehicle accident victims were undertaken.[94] One of the two Inquiry bodily injury claims surveys was conducted to capture information on collateral source payments to accident victims and the extent to which those payments were taken into account, or not taken into account, in bodily injury claims payments. Thirty-five insurance companies, comprising approximately 90% of the Ontario automobile insurance industry, were asked to record collateral source data on every bodily injury liability claims file in the six-week period from April 13 to May 24, 1987. The insurers had to be asked to do this because they do not routinely record that information. Claimants with an income loss were divided into two groups, those with collateral sources of income and those without. 70% of the claimants fell into the latter group. The results of the survey indicated that when all sources of compensation were considered, claimants with collateral benefits received compensation for loss of employment income equal to approximately 136% of their gross wage loss. Those without collateral benefits received approximately 87% of their gross wage loss. Table 10.1 below shows, on a percentage basis, the breakdown by source of the amounts received by claimants with and without collateral benefits:

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[93] No insurers have data on the extent to which bodily injury loss costs are increased because of the application of the collateral source rule.

[94] See Appendix III and Inquiry Research Study IV.

TABLE 10.1

	Amount received by claimants with collateral benefits	Amount received by claimants without collateral benefits
	% of gross wage loss	% of gross wage loss
Third party auto insurance company	70.2	63.5
Own auto insurance company	13.7	23.1
Own employer	36.5	-
Own health insurance company	8.6	-
Government benefits	6.8	-
TOTAL	135.8%	86.6%

The figures in Table 10.1 suggest that there is extensive overcompensation among accident victims with additional sources of income protection.[95] Some explanatory comments are required. The base figure against which the various sources of wage loss compensation is measured is the motor vehicle accident victim's gross wage loss. It would, however, be a mistake to conclude that 100% of gross wage loss represents either the plaintiff's tort system wage loss compensation entitlement, or the plaintiff's wage loss compensation settlement demand. Plaintiffs entitled to compensation for wage loss (past and future) may have been guilty of contributory negligence. Moreover, compensation for lost income is not taxable. Some plaintiffs may, therefore, be willing to accept less than 100% of their gross wage loss, or less than whatever wage loss was payable as a result of contributory negligence. There is no way of quantifying the latter group, which I think may exist largely in the minds of economists. Contributory negligence, as related to the impact of the collateral source rule can, however, be assessed. I think it unlikely that those without collateral sources were, on average, any more or less contributorily negligent than those with access to collateral sources. If that assumption is correct, then we can use those claimants in Table 10.1 without collateral sources as the benchmark group for purposes of establishing a true aggregate wage loss entitlement. It would appear then from Table 10.1 that the real tort system aggregate wage loss compensation entitlement is 86.6% of gross wage loss. The reduction from 100% is mainly the result of contributory negligence.

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[95] Patricia Danzon, in a recent study of medical malpractice claims in the United States, concluded that statutes permitting or mandating the offset of collateral benefits reduced malpractice claims severity by 11 to 18% and claims frequency by 14% relative to comparable states without any collateral source offset. See P. Danzon, "The

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Frequency and Severity of Medical Malpractice Claims: New Evidence," Law and Contemp. Problems 49, no. 2 (1986): 57.

Table 10.1 shows that those claimants with collateral sources received 135.8% of gross wage loss. Table 10.2 quantifies the extent to which those claimants receive loss of income compensation in excess of their tort law entitlement. Assuming that actual wage loss for claimants with collateral sources is $100, the Claims Survey tells us that compensation for tort and collateral sources equals $136. Furthermore, the survey also tells us that these victims are only entitled to $87. Thus, claimants with access to collateral source payments are being overcompensated by $49. How much more are these victims receiving than that to which they are entitled? Forty-nine dollars, as a percentage of entitlement ($87) equals 56%. Therefore, the 30% of victims with collateral sources are receiving 56% more (or half again as much) as their tort law-based wage loss entitlement. This results in an across the board aggregate overcompensation of 17% (30% x 56%). I may say that the 30% estimate of these with collateral sources, if anything, understates the true figure.

TABLE 10.2

135.8%	-	86.6%	=	49.2%
(actual compensation as a percentage of gross wage loss)		(actual entitlement as a percentage of gross wage loss)		(overcompensation as a percentage of gross wage loss)
49.2%	÷	86.6%	=	56.8%
(overcompensation as a percentage of gross wage loss)		(actual entitlement as a percentage of gross wage loss)		(overcompensation as a percentage of actual entitlement)

The results of the Inquiry Claims Survey are consistent with the results of a recent study of medical malpractice claims in the United States. In that study, Professor Patricia Danzon concluded that statutes permitting or mandating the offset of collateral benefits reduced the quantum of malpractice claims by 11 to 18% and claims frequency by 14% relative to comparable states without any collateral source offset.[96] Reduction in claims frequency is often ignored in the debate over the elimination of the collateral source rule. Any reduction in claims frequency can only be assessed in jurisdictions that have eliminated or modified the collateral source rule. Professor Danzon's American research in this area is thus particularly instructive.

Because of subrogation, instances of overcompensation should be relatively rare, at least in theory. Even in the absence of a statutory or contractual right of subrogation,[97] an insured who receives monies under a contract of indemnity is required to account to the subrogated insurer for money received from third parties to the extent that the money received exceeds the amount required for full indemnity.[98]

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[96] See Danzon, "The Frequency and Severity of Medical Malpractice Claims."

[97] Subrogation is really a creature of equity. It is an equitable right belonging to an insurer who has paid for a loss. See National Fire Ins. Co. v. McLaren (1886), 12 O.R. 682.

[98] Gibson v. Sun Life Assurance Company of Canada, [1984] L.R. 6758 (Ont. H.C.) In Glynn v. Scottish Union & National Insurance Co. Ltd., [1963] 2 O.R. 705, the

In practice, it appears that many collateral sources do not exercise their rights of subrogation. Employers consider the exercise of subrogation rights to be costly and, where recovery is attempted months or years after the benefit is provided, impractical. Employers are reluctant to subrogate because of employee relations considerations. Some sickness and accident carriers are of the view that the cost to establish and maintain a subrogation system outweighs the benefits to be derived from such a system.[99] Government departments do not often seek repayment of monies paid to accident victims under social welfare legislation. This is in part due to the cost of subrogation. It is also due to an absence of information as to whether subrogation rights exist. At the federal level, U.I.C. has no information about what is being paid to motor vehicle accident victims through the U.I. sickness/accident benefit. At the provincial level, the Ministry of Community and Social Services (COMSOC) has little or no information on what is paid to motor vehicle accident victims. In the end result, neither U.I.C. nor COMSOC knows whether it has a right of subrogation.

Overcompensation is inconsistent with the principles which govern the assessment of tort damages. It is

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Ontario Court of Appeal held that the right of subrogation arises, unless expressly excluded, in every contract of indemnity insurance. Subrogation does not arise from non-indemnity contracts of insurance unless expressly provided.

[99] Feldthusen, Research Paper.

incompatible with equity's concern with unjust enrichment. It is also costly.

Three arguments have been used to justify the collateral source rule. The first argument is that without the rule, the wrongdoer receives the benefit of the fortuitous circumstance that the accident victim had collateral benefits.[100] This argument focuses on the wrongdoer, whereas, in my view, the appropriate focus is on the victim's loss. The paramount objective should be to restore the injured person to the position he or she would have been in had the accident not occurred. The collateral source rule does not achieve this objective.

The second argument is that the collateral source rule is justified on grounds of deterrence.[101] It is argued that only by making the tortfeasor responsible for all of the victim's losses is the optimal amount of deterrence achieved. This argument may be sound in theory, but in practice the deterrent effect of the collateral source rule is likely to be, at its highest, trivial, particularly given the existence of compulsory liability insurance. If the tort system as a whole only achieves modest or marginal deterrence objectives, there can hardly be much deterrence in the collateral source rule.[102]

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[100] See, for example, Bourgeois v. Tzrop (1957), 9 D.L.R. (2d) 214, per Ritchie, J. at 224-5; Parry v. Cleaver, [1970] A.C. 1, per Lord Pearce.

[101] Rea, An Economic Perspective. This is the argument from the law and economics literature.

[102] See the discussion on deterrence in Chapter 12.

Moreover, deterrence does not justify double recovery, rather, it suggests the exercise of subrogation rights.

Finally, it is argued that without the rule the injured person is deprived of a benefit for which he has paid and bargained.[103] In my view, this argument misses the point. In the case of indemnity payments, what a person has paid for is insurance against specific pecuniary losses. What the insured gets is the security of having coverage should the loss occur and indemnity for the loss when it does occur. In short, when an injured person receives a collateral benefit in the nature of an indemnity payment, he receives exactly what he bargained for. There is no doubt that a defendant obliged to make payments to a person with collateral sources will pay less. On compensation principles that does not justify overcompensating a plaintiff who has received the benefit of collateral source payments.

Professor Denise Reaume, in a research paper for the O.L.R.C. project, defends the collateral source rule on the ground that the plaintiff is not simply entitled to compensation if the plaintiff has been the victim of a tort, but is entitled to compensation from the defendant because it is the defendant who tortiously caused the injury. The fact that the same event has also triggered a payment to the plaintiff from another source is, according to Professor Reaume, irrelevant. I find this argument unconvincing.

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[103] Boarelli v. Flannigan at p. 79. In Shearman v. Folland, [1950] 1 All E.R. 976, the English Court of Appeal in refusing to deduct private insurance benefits stated:

> If the wrongdoer were entitled to set off what the plaintiff was entitled to recoup or had recouped under his policy, he would in effect be depriving the plaintiff of all benefit from the premiums paid by the latter, and appropriating that benefit to himself.

I am of the opinion that the collateral source rule as presently applied in Ontario is wasteful in practice and cannot be justified in principle. It ought to be changed. I make no apology for having taken cost into account. Those who pay automobile insurance premiums are paying for the collateral source rule as it relates to motor vehicle accident loss of income compensation. Most insureds have never heard of the collateral source rule (a fact that goes to dilute the deterrence argument); when they are injured in a motor vehicle accident they are surprised to learn they can be paid twice for the same wage loss.[104] Many right thinking people find the collateral source rule inappropriate from the general standpoint of compensation fairness. Were the collateral source rule to be eliminated, injured claimants would recover whatever wages they had actually lost and total savings to the system would be approximately $35 million. All of Ontario's insured drivers would pay approximately $7 less for automobile insurance.[105] In addition, there would be a positive premium ripple effect. Prejudgment interest would be reduced. Party-and-party costs paid on settlements would be less because costs are generally calculated on a percentage of the settlement amount. If first party no fault accident benefits are increased (and continue to be a third party offset) and if collateral benefits are taken into account so as to reduce the claimant's third party entitlement, many wage loss claims will never enter the tort system.

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[104] I make this statement from my own experience in dealing with clients injured in motor vehicle accidents.

[105] Estimate of J. Cheng, Eckler & Partners, based on Inquiry Claims Survey data. This is a conservative estimate.

There are two main ways to effect a change in the collateral source rule. One way is to maintain the rule but provide for better exercise of subrogation rights. The second way is simply to abolish the rule.[106]

Subrogation is costly. Most importantly, to the extent subrogation rights are not exercised because of cost or other factors, the situation will remain the same as it is now. The right of subrogation does not mean very much if it is not exercised. In my view, even given full information, it is unlikely in most cases that subrogation rights will be exercised for cost and public relations-related reasons. It seems to me, therefore, to be inappropriate to develop a model for eliminating overcompensation caused by the collateral source rule which is premised on subrogation. If the collateral source rule is abolished subrogation rights will still exist and may still be exercised, however, infrequently. If those rights are exercised, the wrongdoer's insurer will simply be required to pay the collateral source payor.[107]

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[106] Feldthusen, Research Paper. The O.L.R.C. suggests two other possible mechanisms for avoiding overcompensation -- a direction by the court to repay, and an independent cause of action by the source of the collateral benefit. See O.L.R.C., Report, Vol. II (1987), pp. 416-419.

The O.L.R.C. has recommended facilitating subrogation by the following proposal:

> Where an injured person has received an indemnity, or an ex gratia payment, in respect of any specific pecuniary loss claimed from a wrongdoer, the damages in respect of that loss should be held in trust for the collateral source. Moreover, the wrongdoer, or his or her insurer, should be entitled to make payment of such damages directly to the collateral source and should be entitled to receive a discharge of liability to the injured person, to the extent of such payment. Payment of such amount of damages should also include pre-judgment interest on the amount.[108]

It might be argued that this proposal internalizes costs to the motor vehicle accident insurance system. It is not clear to me that such internalization is preferable to allocating primary responsibility to first party sickness and accident insurers by abolishing the rule. Furthermore, I am doubtful the O.L.R.C.'s proposal will work in the real world. Claimants effecting a tort system recovery now hold money in trust for collateral source payors who routinely choose not to exercise rights of subrogation. Recognizing this, I think it is unlikely that automobile insurers will frequently opt to pay the collateral source directly. In the end result under the O.L.R.C. proposal nothing will change. Claimants will continue to be overcompensated. I am generally in agreement with Professor Feldthusen's views that subrogation has to be looked at as a practical as well as an academic issue.

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[107] In his paper, Feldthusen sets out three possible models of distribution:

(i) the collateral source rule/no subrogation;
(ii) the collateral source rule/subrogation; and
(iii) no collateral source rule/no subrogation.

The risk of the second model is that in practice it will collapse into the first model. The O.L.R.C. adopts the second model with proposed mechanisms to increase its effectiveness. It may, however, be questioned whether these mechanisms would work in practice.

[108] See O.L.R.C., Report, Vol. II (1987), p. 432.

The abolition of the collateral source rule is the most effective and least expensive method for eliminating overcompensation. Collateral benefits should be deducted from the relevant components of the tort award. Subrogation, to the extent it occurred, would take place between the collateral source insurer and the tortfeasor (or the insurer).

The remaining consideration is whether the collateral source rule should be eliminated with respect to all collateral benefits, or only some of them. I exclude non-indemnity payments from this discussion. I also exclude gifts.[109] Collateral benefits in the nature of indemnity payments may be conveniently divided between benefits from public programs such as unemployment insurance and benefits from private or group contracts of insurance such as employment disability plans.

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[109] One could include voluntary payments by employers in the nature of salary continuation. The O.L.R.C. took into account all *ex gratia* payments in its proposal.

The case for the elimination of the collateral source rule is perhaps more compelling with respect to public benefits.[110] The purchase of government benefits is generally mandatory. An individual has no choice whether to obtain such insurance. Therefore, to permit overcompensation in respect of government benefits is particularly wasteful.[111] I think that the rule should also be eliminated with respect to collateral benefits from non-government sources for the reasons I have already outlined.

Accordingly, I recommend that the Government of Ontario enact legislation[112] which provides as follows:

1. That the collateral source rule be abolished;
2. That where an injured person receives collateral benefits in the nature of indemnity payments from either public or private sources, the amount of such payments (subject to income tax, where appropriate, as discussed below) be deducted from the relevant components of a tort award made to

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[110] The O.L.R.C. considered and rejected deducting publicly provided benefits because it was inconsistent with deterrence and because it questioned the desirability of transferring to the entire tax-paying public the cost of an activity carried on by only a portion of the public. See O.L.R.C., Report, Vol. II (1987), pp. 434-5.

[111] See Rea, An Economic Perspective.

[112] Legislation would be required to modify the common law rule in Boarelli v. Flannigan, supra.

the injured person so that there will be no overcompensation.

I further recommend that both the Government of Ontario and the Government of Canada conduct a review of their respective programs which provide income assistance in the event of an accident in order to determine:

(a) the amount of monies paid to persons injured as a result of motor vehicle accidents; and
(b) the extent to which rights of subrogation in respect of these payments are being exercised or are feasible.

There are two other matters which must be considered. First, regard must be had to the fact some collateral source payments are taxable and tort awards for income loss are not taxable. Thus, if the full amount of taxable collateral source payments is deducted from a tort award, the claimant with taxable collateral benefits will be in a worse net position than the claimant without collateral sources (or taxable collateral sources). This result would be unjust. Accordingly, I recommend that taxable collateral source payments be deducted net of tax. In its supplementary submission the I.B.C. recognized the problem created by taxable collateral source payments were the collateral source rule to be abolished. The I.B.C. recommended that a flat 20% tax factor be applied to reduce the collateral source offset. It seems to me that to resort to a predetermined tax rate makes sense in the interests of efficiency and consistency. The 20% flat rate proposed is relatively neutral. In its final application it will work to the slight disadvantage of high income earners in receipt of taxable collateral source payments.

The second matter is the manner in which collateral source adjustments will be made for future income loss collateral source payments. The problem here is that the claimant's receipt of those future collateral source payments will always be a matter of varying uncertainty. To address this problem, I recommend that loss of future income be established and paid without collateral source offset, but that the claimant hold future collateral source payments in trust for the third party insurer, net of tax where applicable. While I recognize the possibility exists for claimants not to cooperate in ensuring continued collateral source coverage, I have sufficient faith in humanity to think this will not often happen.

G. JOINT AND SEVERAL LIABILITY

As a result of section 2 of the Negligence Act, when a plaintiff is injured as a result of the negligence of two or more persons, each person is jointly and severally liable for the plaintiff's damages.[113] In other words, as

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[113] R.S.O. 1980, c. 315. Section 2 provides as follows:

> 2. Where damages have been caused or contributed to by the fault or neglect of two or more persons, the court shall determine the degree in which each of such persons is at fault or negligent, and, where two or more persons are found at fault or negligent, they are jointly and severally liable to the person suffering loss or damage for such fault or

between the plaintiff and the defendants, any defendant found negligent is responsible for the entire amount of the plaintiff's loss regardless of that defendant's degree of fault.[114]

Recently, there has been considerable debate as to whether the rule of joint and several liability should be abolished or at least modified.[115] Much of the debate has turned on the question of basic fairness.[116] Those who support the abolition of the present rule argue that it is unfair to require any single defendant to pay damages which are disproportionate to that defendant's share of fault. In its most graphic form, a defendant who is only 1% at fault may have to pay 100% of the plaintiff's judgment if a co-defendant, although 99% at fault, is judgment-proof. For those who favour abolition of the rule, the usual reform proposal is that each joint

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> negligence, but as between themselves, in the absence of any contract express or implied, each is liable to make contribution and indemnify each other in the degree in which they are respectively found to be at fault or negligent.

[114] As between themselves, defendants, absent any agreement to the contrary, are liable to indemnify each other in the degree in which they are respectively found to be at fault or negligent.

[115] See, for example, Ontario Task Force on Insurance, Final Report (1986), pp. 55-56.

[116] See G.L. Priest, Joint and Several Liability: The Issues and Remaining Questions (Toronto: Ontario Law Reform Commission, 1987). - (Contribution Among Wrongdoers Project).

tortfeasor will be liable only in proportion to his own degree of fault.[117]

On the other hand, those who seek to preserve the present rule argue it is fairer that a wrongdoer, as opposed to the innocent plaintiff, bear the burden of another wrongdoer's insolvency.[118] The academic literature has taken the debate beyond the issue of fairness and has examined the rule from the perspectives of accident prevention and risk allocation.[119] There is little empirical evidence available to assess the monetary impact of joint and several liability.[120]

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[117] Variations on this basic reform proposal can be found in several American states. For example, under Michigan tort reform legislation, a public entity is responsible for its proportionate share of economic and non-economic damages. If a court decides the amount owed by one or more of the defendants is not collectible, a public entity would pay only a percentage of the uncollectible amount equal to its degree of liability. In Alaska, any party responsible for less than 50% of the total fault cannot be held liable for any damages equal to more than twice its percentage of fault. See Business Insurance (August 18, 1986).

[118] It may be said that the fairness argument for victims loses at least some force when the victim is contributorily negligent; however, the rule of joint and several liability still applies. See for example Menow v. Honsberger, [1970] 1 O.R. 54, aff'd [1971] 1 O.R. 129, aff'd [1974] S.C.R. 239. For a critique, see Lewis Klar, "Contributory Negligence and Contribution Between Tortfeasors," in Studies in Canadian Tort Law/ed. L. Klar (Toronto: Butterworths, 1977), pp. 163-165.

[119] William M. Landes and Richard A. Posner, "Joint and Multiple Tortfeasors: An Economic Analysis," J. of Leg. Stud. 9, no. 3 (1980): 517; Frank H. Easterbrook et al., "Contribution Among Anti-Trust Defendants: A Legal and Economic Analysis," J. of L. and Econ. 23, no. 2 (1980): 331; A. Mitchell Polinsky and Steven Shavell, "Contribution In Claim Reduction Among Anti-Trust Defendants: An Economic Analysis," Stan. L. Rev. 33 (1981): 447.

Whether the practical concern over joint and several liability is justified in situations where one of the defendants has a "deep pocket" and the other is likely to be impecunious is outside the scope of this Inquiry.[121] I think it is fair to state that in the motor vehicle accident context, the rule is of limited concern. Ontario insureds have compulsory third party liability minimum limits of $200,000. Many have coverage in excess of that amount. The average third party liability coverage is about $500,000. Over 90% of insureds have underinsured motorist coverage (SEF 44). The risk of failing to collect on a judgment from the appropriate party or parties is much lower in the motor vehicle context than in other fields of tort law. In light of these observations, I see no sound reason to recommend any change to the present rule of joint and several liability. The issue deserves further study.

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[120] Priest, Joint and Several Liability.

[121] Concern over the application of joint and several liability has most often arisen in the case of "deep pocket" defendants such as municipalities, public utilities and professionals.

CHAPTER 11

ALTERNATIVE COMPENSATION SYSTEMS

I have considered a number of different proposals for reform of Ontario's automobile accident compensation system. Some were based on systems in place in other jurisdictions. Some were found on the pages of law review articles or in textbooks. Still others involved making various modifications to the existing system, without changing its basic structure.

The various alternative compensation schemes may be conveniently identified as follows:

(i) the tort system;
(ii) the tort system, together with add on no fault benefits;
(iii) a pure no fault system for automobile accidents;
(iv) threshold systems;
(v) a comprehensive no fault system for all injuries caused by accidents or for all disabilities; and
(vi) other compensation proposals.

A. THE TORT SYSTEM

The tort system is now the principal and certainly the most generous method of compensating automobile accident victims in Ontario. One alternative is to make it the only method of compensation (aside from collateral, public and private schemes). Implicit in this alternative is the abandonment of compulsory no fault benefits now contained in Section B of the standard automobile insurance policy.

To the extent that individuals wished no fault disability coverage, they could purchase it on an optional basis, or look to private employment plans or public programs for protection in the event of injury as a result of a motor vehicle accident.[1] No fault benefits have been firmly in place in Ontario since 1972. It would, in my view, be a retrograde step, not justified by current social policy or by any substantial cost savings, to revert to the system in place in this province in the 1960s.[2] Accordingly, while I identify a return to the tort system as an available option, it is not one that I have seriously entertained.

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[1] One argument against compulsory first party benefits is that many people already have good, basic protection in the event of short-or long-term disability by way of employee plans. It is argued that to require these individuals to purchase first party insurance that they do not want and likely will never use is unfair and smacks of paternalism. By comparison, compulsory third party insurance is more defensible in that it is appropriate for governments to demand that one who breaks the rules of the road has the means to satisfy the plaintiff's judgment. See Richard A. Epstein, "Automobile No-Fault Plans: A Second Look at First Principles," Creighton L. Rev. 13 (1980): 769.

[2] No fault benefits are now relatively inexpensive. They provide necessary income and medical protection to those accident victims who are without other sources of first party insurance. If car owners were permitted the option of not purchasing these benefits, the cost for those who did require them would be excessive. See also S. Rea, "Economic Analysis of Fault and No-Fault Liability Systems," Can. Bus. L. J. 12, no. 4 (1987): 444 where the author examines possible economic justifications for compulsory first party insurance. Of the five possible arguments he considers (redistribution of income to the disabled, consumer underestimation of risk, adverse selection, a better society if the healthy know the disabled are compensated, and as a way to offset the disincentives to private insurance from the existence of government programs), Professor Rea concludes that only the adverse selection argument has merit. The argument is that if insurance is voluntary, high risk individuals will be most likely to buy insurance. The resulting increase in the cost of insurance may make insurance less attractive for low risk groups. Compulsory no fault

B. THE TORT SYSTEM WITH ADD ON NO FAULT BENEFITS

This is the system currently in place in this province. It is also the system in place in every other province in Canada, save for Quebec. The standard automobile insurance policy issued in Ontario provides for compulsory no fault benefits paid on a first party basis; that is, by the insured's own insurer.[3] A person injured in an automobile accident is, subject to specifically defined exclusions, entitled to receive these benefits on a no fault basis. The details of these benefits have been discussed elsewhere. Suffice it to say here that they are quite modest. The Ontario no fault benefits are collectively referred to as Accident Benefits. The income replacement no fault benefits are referred to as Disability Benefits. The injured person's access to the tort system is in no way restricted by receipt of no fault benefits in an add on system. No fault accident benefits paid or available are deducted from any tort award.[4]

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automobile insurance would allow both groups to purchase insurance at average rates. I do not agree with this argument. If first party automobile insurance were not compulsory, high risk individuals and those needing the coverage most from an economic standpoint may be the least likely to buy it voluntarily.

[3] For a detailed analysis of the policy see J. Newcombe, The Standard Automobile Policy Annotated.

[4] See the Insurance Act, R.S.O. 1980, c. 228, s. 233(2). See Malat v. Bjornson, [1981] 2 W.W.R. 59.

The rationale for the introduction of no fault benefits in Ontario is somewhat unclear. They may have been introduced more to provide injured plaintiffs with some money to tide them over until the trial or settlement of their tort actions, than to provide basic protection to accident victims, regardless of fault. If Accident Benefits were designed to remove the minor injury cases from the court system, they have not had that effect. If anything, the availability of Accident Benefits has acted as a spur to litigation by removing some of the monetary pressure on plaintiffs to effect an early settlement of their claims.

There is no doubt that if the no fault benefits in an add on system, or otherwise, are to serve any useful purpose, they must be increased. Inflation alone would justify an increase in Accident Benefits. The level at which these benefits are set, however, will turn on what is sought to be achieved by compulsory first party benefits. There is general agreement that first party no fault benefits should at least ensure basic income maintenance, medical protection and access to rehabilitation without delay to all Ontario motor vehicle accident victims.

The automobile no fault benefits are not primary. Many insureds in the province are already covered for economic losses by short-and long-term disability programs and accordingly are being obligated to purchase a package of no fault benefits which they will not use at all, or to a very limited extent, in the event of a motor vehicle accident. The higher the level of benefits, the higher the cost. It may be questioned what increase in premiums can be justified for a coverage which is irrelevant to the insurance needs of many who are forced to buy it. This goes to the fundamental issue of opting out. Another consideration is the percentage of cases that may be removed from the tort system if the no fault benefits are made more generous. A further consideration is whether eligibility for disability benefits should be expanded to compensate non-income earners. I will return to these and related issues in Chapter 12.

Those who favour add on systems argue that such systems preserve the best of both worlds. The delivery of reasonable no fault benefits ensures protection for income losses and medical expenses without delay for most victims. At the same time, access to fault-based compensation through the courts is preserved, not demolished as in pure no fault, nor diluted as in threshold no fault systems.[5]

C. PURE NO FAULT (MOTOR VEHICLE ACCIDENT COMPENSATION ONLY)

One option which must be given serious consideration is to abolish access to the tort system entirely for motor vehicle accident victims and replace it with a pure no fault system of compensation. The province of Quebec did so in 1978.[6] The Ontario Task Force on Insurance recommended that Ontario implement a no fault automobile insurance compensation system.[7] The majority of tort scholars both here and in the United States favour such a scheme,[8] although it seems to me the real preference of many of that group is for a comprehensive disability compensation plan.

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[5] See Gary T. Schwartz, "The Advantages of Tort," in Personal Compensation for Injury. Proceedings of a Seminar on Personal Compensation for Injury Sponsored by the Faculty of Law, Australian National University, August 1984. Linden suggests that an add on plan reflects "the peaceful co-existence" of tort and no fault.

[6] Automobile Insurance Act, L.Q. 1977, c. 68.

Under a pure no fault system, the injured person loses the right to sue in tort entirely. Instead, compensation is paid solely on a first party basis, regardless of who is negligent or at fault in the accident. Generally, compensation takes the form of payment for income losses, medical and rehabilitation expenses and death benefits. A no fault system can also provide for compensation for non-economic loss. A no fault plan will inevitably have to compensate more injured persons than the tort system, those at fault as well as those not at fault; in order to fund such a plan without the cost being prohibitive, it is generally thought necessary to reduce, if not eliminate, compensation for non-economic loss (pain, suffering and loss of enjoyment of life). If compensation for non-economic loss is provided (as is the case in Quebec and New Zealand), that part of compensation is established by schedule.

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[7] See Ontario Task Force on Insurance, A Pre-Publication of the Final Report (1986), Vol. I, p. 105. The Task Force recommended that in the short term a no fault automobile accident compensation scheme should be implemented; as a medium-term objective, the Task Force recommended a universal accident compensation plan; and as a longer term objective recommended federal and provincial governments should begin planning the co-ordination and rationalization of all existing first party no tort compensation schemes into a universal disability compensation program. The Task Force Report used the descriptive term "no tort" as opposed to no fault. This seems to have been a matter of marketing, not substance.

[8] See e.g., Fleming, The Law of Torts. - 6th ed., Chap. 19, esp. pp. 370-371; Stephen D. Sugarman, "Doing Away with Tort Law," Cal. L. Rev. 73, no. 3 (1985): 558; Bernzweig, By Accident, Not Design; Ison, The Forensic Lottery; O'Connell, The Lawsuit Lottery (and numerous other writings); Dunlop, "No Fault Automobile Insurance and the Negligence Action," Osgoode H. L. J. 13, no. 2 (1975): 439.

Two further observations are in order. First, whether to establish a no fault compensation plan is an issue which is quite separate from the issue of whether automobile insurance should be delivered by the government or by the private sector. Second, compensating the injured on a no fault basis does not necessarily mean that premium levels will be set without regard to fault. Some knowledgeable commentators in this field are of the view that an important unresolved issue under a no fault regime is how to set premiums.[9] If everyone in the system pays the same premium (as is the case in Quebec) there will be more high risk drivers on the road. This will inevitably lead to higher accident, injury and death rates. The data available from Quebec suggest this result.[10] Experience-rating, unlike flat premium rating, requires the commitment of resources to somehow allocate accident fault, if involvement in at-fault accidents is to be a premium rating factor. While premium setting is distinct from compensation, it is an issue that all no fault regimes must address. This issue will be addressed further in Chapter 12.

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[9] See for example, M.J. Trebilcock, Where do the Bucks Stop? (1987). (Unpublished).

[10] See M. Gaudry, Measuring the Effects of the 1978 Quebec Automobile Insurance Act with the DRAG Model.

Those who support no fault generally put forward the following main arguments:[11]

(a) Universal Compensation

A no fault system ensures adequate compensation for all injured victims of car accidents, not just those who can establish fault. At a time when it might be said that car accidents are an inevitable by-product of modern society, it is no longer appropriate to gear entitlement to compensation to the absence of negligence, or conversely, the presence of fault. The goal of universal compensation is compromised to the extent that any given no fault plan contains driver conduct-related exclusions.

(b) Guaranteed Protection for Economic Loss

A no fault system provides guaranteed basic protection against income loss and medical and rehabilitation expenses.

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[11] See Chapter 8. The arguments are set forth in Keeton and O'Connell, Basic Protection for the Traffic Victim (1965); Bernzweig, By Accident, Not Design (1980); Ison, "The Politics of Reform in Personal Injury Compensation," U. of T.L.J. 27 (1977): 385 and Keeton, "The Case for No Fault Insurance," Miss. L.J. 44 (1973): 1. In Cassidy v. McGovern, 415 Mich. 483 at 498-99, the Michigan Court indicated that no fault laws were designed to remedy the shortcomings of the traditional tort recovery system--overcompensation of serious injuries, long payment delays, overburdened court systems, and discrimination against those with low income and little education.

(c) **No Delay**

A no fault system provides benefits to the accident victim without excessive delay, and certainly far sooner than the tort system. It is argued that this is particularly important in the case of rehabilitation where early intervention is critical.[12]

(d) **Greater Efficiency**

A no fault system returns more of the premium dollar to accident victims because transaction costs are reduced. To the extent that non-pecuniary loss is not paid in a no fault system and is paid in the tort system, cost savings result; however, this is not an efficiency issue.

(e) **Greater Accuracy of Assessment**

A no fault plan has the capacity to provide for a more accurate assessment of a victim's future needs because it can be designed to deliver reviewable periodic payments over time. The tort system's lump sum payment necessarily requires a present prediction (which may well be wrong) about future compensable losses. Although the issue of periodic versus lump sum payments often arises in the context of the benefits of no fault automobile compensation, there is nothing to prevent legislation permitting reviewable periodic payments within the tort system.[13]

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[12] A corollary point is that for effective rehabilitation it is important to develop a positive attitude in the victim stressing the achievements that can be made rather than the tragedy which has occurred. It is said a no fault system better accomplishes this objective because the victim no longer foregoes treatment in order to gain a higher damage award. See Dunlop, "No-Fault Automobile Insurance and the Negligence Action."

(f) **No Loss of Deterrence**

A no fault system loses nothing by way of deterrence or accident prevention. That task can be adequately handled by regulatory and criminal sanctions, driver experience-rated premiums and one's instinct for self-preservation. The Ontario Task Force on Insurance dealt with this issue by emphasizing the desirability of separating the deterrence function and the compensation function.

(g) **Determination of Fault Unrealistic**

Fault finding is an impractical criterion for compensation in motor vehicle accident cases. Not only, it is said, is it difficult to draw the dividing line between errors of judgment and true "fault" but, in practice, to use the late Dean Wright's phrase, "...the case that is actually tried by a jury is a case that never in fact took place..."?[14] It is argued that the negligence action is akin to a "forensic lottery".

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[13] See Chapter 10.

[14] C.A. Wright, "The Adequacy of the Law of Torts," in Studies in Canadian Tort Law/ed. A.M. Linden, 1968.

The Régie

Quebec is the only jurisdiction in North America that administers a separate plan on a complete no fault basis for the compensation of victims of automobile accidents. I have studied the Quebec plan and, to gain a better appreciation of how it operates, I have travelled to Quebec City and have spoken to some of those responsible for administering it, as well as to some of its critics and defenders.

In March 1978, the Parti Québecois introduced a new plan for compensating those injured in motor vehicle accidents.[15] The new plan abolished the existing Quebec fault-based system (which had very modest add on no fault benefits) and replaced it with a complete no fault system of compensation for bodily injury. Access to the courts was precluded. The plan is publicly administered and delivered by the Régie de l'Assurance Automobile du Québec,[16] a government board. The Régie, with control over its own budget, is virtually autonomous. It now reports to the provincial Minister of Transport. Premiums are reviewed by the Quebec Cabinet.

The Régie pays the following compensation to persons who sustain injury in an automobile accident:[17]

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[15] Automobile Insurance Act, L.Q. 1977, c. 68.

[16] An Act to Establish the Régie de l'assurance automobile du Québec, L.Q. 1977, c. 67.

[17] The Northern Territory in Australia has also done away with common law rights entirely for motor vehicle accidents. See Motor Vehicle Accidents (Compensation) Act, 1979.

(i) An income replacement indemnity, payable after a one-week waiting period and for so long as the disability lasts. The indemnity is indexed, not taxable, and is based on 90% of an individual's net income to a maximum gross income (as of January 1, 1987) of $35,500.[18] The maximum weekly indemnity now stands at $470. Even those not in the work force (persons at home, unemployed persons, retired persons and students) receive income replacement benefits;

(ii) Reimbursement for reasonable expenses incurred because of the accident;

(iii) Compensation to facilitate rehabilitation;

(iv) A lump sum indemnity in accordance with a pre-established scale for the after effects of the injury and pain and suffering or loss of enjoyment of life to a maximum of $39,329.13 for accidents occurring in 1987;[19] and

(v) In the case of fatalities, the Régie pays a lump sum death benefit ($8,046.48 as of January 1, 1987) or a pension (varying between $157.32 and $375 in 1987) where the victim has left one or more dependants. The Régie also pays $2,682.16 for funeral expenses.[20]

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[18] See the Régie, Annual Report, 1986.

[19] Régie, Annual Report, 1986.

These benefits are primary. A claimant who is dissatisfied with the decision of a Régie claims administrator may apply to the Régie for a review. There is then a right of appeal to the Commission des Affaires Sociales,[21] whose decision is said to be final. I was told that, last year, there were approximately 35,000 claims to the Régie. The number of claims reviewed or appealed was not inconsequential. Of the 35,000 claims, there were 5,000 reviews and a further 2,000 appeals to the Commission des Affaires Sociales. Many reviews were over the question of non-economic loss.

The pricing of insurance in the plan involves a fixed premium for a given class of vehicle without regard to the driver's individual risk. The effect of flat premiums on accident frequency has been studied by Professor Gaudry. The results of his study are discussed in Chapter 12. Professor Gaudry found an increase in the rate of accidents, both for injuries and fatalities after the introduction of the Régie.[22] At my request, Professor

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[20] Régie, Annual Report, 1986.

[21] Discussion with Régie administrator in Quebec City, July 9, 1987.

[22] See M. Gaudry, Measuring the Effects of the 1978 Quebec Automobile Insurance Act with the DRAG Model. Gaudry estimated that the effect of the Régie was an increase in accidents of 6.8% for fatalities, 26.3% for injuries and 11.0% for property damage only.

Gaudry did a further study for the Inquiry [23] in which he examined in more detail the possible causes of the observed increases in accident rates. One of his conclusions was that flat premium rating resulted in cross-subsidization of high risk drivers. That conclusion is inescapable when high risk drivers and low risk drivers pay the same premiums. Professor Gaudry stated that in Quebec cross-subsidization has resulted in an increase in the total population of high risk drivers. This, in turn, has resulted in an increase in total accidents, bodily injury accidents and fatal accidents. Professor Gaudry is of the view that any sensible experience-based rating system would assist in correcting Quebec's accident frequency problem.

Vehicle damage claims remain outside the Quebec plan and are administered by the private sector. These claims have been removed from the court system because of the statutory provision that the insured is compensated for his property damage by his own liability insurer who indemnifies him directly under the liability section of the policy, to the extent that the insured is not responsible for the accident. Fault is determined by an internal insurance fault schedule. As provided by the statute, the insurers have established the "Corporation des Assureurs Agrées" which administers the "Direct Compensation Agreement" to which all authorized insurers must adhere. Resort to the fault chart does not dispense with the need to investigate fault in all cases. Before fault is determined through the fault chart, insurers have to determine how an accident occurred. This will sometimes require an extensive investigation.

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[23] See Inquiry Research Study I.

Although politics likely determined its introduction, Quebec's no fault plan was not born in a vacuum. In 1973, the Gauvin Committee of Inquiry on Automobile Insurance reported that the existing fault regime had engendered high costs of insurance, long delays before obtaining compensation and, further, many victims with real losses were not being compensated either because they were at fault or because defendants' coverage was inadequate; in such cases, it was said defendants were often insolvent.[24] The Parti Québecois accepted the main compensation-related recommendations of the Gauvin Committee, but rejected the Committee's recommendation in favour of private sector delivery.

Some of the ills that led to the introduction of no fault in Quebec appear to have been addressed by the new regime. A recent study of the Quebec system by two University of Montreal economics professors, Claude Fluet and Pierre Lefebvre, released in February 1986, generally commented favourably on the reform.[25]

One of the things the Régie does particularly well is to provide rehabilitation. There are now some 35 rehabilitation specialists working for the Régie, handling about 70 patients each. They deal with vocational rehabilitation, with the hospital side of rehabilitation being dealt with separately by the Quebec Hospital Plan. The Régie has statutory authority to stop payments if a person refuses rehabilitation without just cause.

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[24] See Ontario Task Force on Insurance, A Pre-Publication of the Final Report (1986), Vol. II, Appendix 12.

[25] See Excerpt from C. Fluet and P. Lefebvre, L'Assurance automobile du Québec: Bilan d'une Réforme, (February 1986) in Ontario Task Force on Insurance, A Pre-Publication of the Final Report, Vol. II, Appendix 13. The authors studied the results of the Régie during the period 1979-1984.

Although the Quebec plan appears to be working reasonably well overall, there are signs of some dissatisfaction. This dissatisfaction is focused on the view that the seriously injured are not treated fairly. A series of amendments whose main purpose is to improve the lot of the more seriously disabled is now being considered by the government.[26] Under these proposed amendments, the maximum lump sum payment for non-pecuniary damage is to be increased from its present level of approximately $39,000 to $125,000. The latter figure is seen as being justified in light of the Trilogy. In order to receive any amount for non-economic loss the new proposals require that there be permanent physical or mental impairment by reason of the accident.[27] A one year whiplash, for example, would likely receive nothing for non-pecuniary loss under the proposed amendments.

In order to finance the sizeable lump sum increase that is proposed, premiums must go up or money must be taken from elsewhere in the system. The Régie chose to reduce existing benefits to the detriment of non-income earners. Under the proposed amendments, non-income earners will get nothing for six months, at which time an estimate of future income loss will be made based upon capacity.[28] A victim who worked inside the home at the time of the accident will be entitled to an indemnity of $70 per week if unable to attend to the majority of tasks related to the care of cohabitants; an indemnity of $50 per week if unable to attend to the majority of tasks related to the preparation of meals; and an indemnity of $50 per week if unable to attend to the majority of tasks related to household maintenance.[29] Under the amendments, death benefits are to be decreased and paid in a lump sum rather than on a periodic basis.[30] The new amendments are estimated to require a net 4.5% increase in the Régie's budget. At the time of the writing of this Report, these proposed changes had yet to be enacted into law.

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[26] See Draft Bill: An Act to Amend the Automobile Insurance Act and Other Legislation 1987. [Henceforth: Draft Bill (1987)].

[27] See section 83.1 of the Draft Bill.

D. THE THRESHOLD NO FAULT

Under a threshold plan, first party no fault benefits are provided to all accident victims, but tort actions are only allowed above the "threshold". Apart from cost, thresholds seem to be designed either to keep less serious cases out of court, or to allow more serious cases into court. From a cost standpoint, the emphasis must be on the savings which accrue by keeping claims below the relevant threshold out of court. Aside from reduced transaction costs, what is saved is the non-pecuniary general damages not paid in those cases which fail to meet the threshold. Costs, of course, are increased by the payment of economic loss on a no fault basis.

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[28] See sections 23-53 of the Draft Bill.

[29] Draft Bill, sections 34, 35.

[30] Draft Bill, sections 75ff. This reflects the notion that it is economically inefficient to deal with smaller claims in the tort system in that their nuisance value likely means they are overcompensated and in that transactions costs are relatively high in relation to the amount of the claim.

There are two basic types of threshold: monetary and verbal.[31] Under a monetary threshold, a victim is only able to maintain a tort action if, for example, the victim's medical expenses exceed $1,000. A verbal threshold is expressed in descriptive terms such as "serious impairment of body function" or "serious permanent disfigurement".

Inspired by the Keeton-O'Connell plan,[32] 18 states in the United States in the late 1960s to mid-1970s adopted threshold no fault plans for compensating automobile accident victims.[33] Enthusiasm for these plans south of the border appears to have waned. No new plans have been put in place in the last decade. Two states (Pennsylvania and Nevada) have abolished their threshold systems in favour of a return to unrestricted access to the tort system. At present, there are 16 states with threshold no fault plans. One state has a monetary threshold only;[34] 4 states have exclusively verbal thresholds;[35] and 11 states have a combination of monetary and verbal thresholds.[36] No state with a threshold provides first party benefits for non-pecuniary losses.

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[31] Some jurisdictions, such as the state of New York, use what may be termed a "numerical" threshold, for example, days of disability.

[32] Keeton and O'Connell, Basic Protection for the Traffic Victim (1965).

[33] See J. Hammitt et al., Automobile Accident Compensation, Vol. 4: State Rules (1985). See also U.S. Department of Transportation, Compensating Auto Accident Victims (May 1985). The Northern Territory of Australia adopted a threshold plan in 1979 which is discussed in Fleming, The Law of Torts, pp. 373-4.

Monetary thresholds have the virtue of certainty. When expressed in absolute dollars, there can be little dispute as to whether an accident victim has or has not met the threshold. On the other hand, medical expenses incurred, for example, may not be a reasonable proxy for injury severity, or more importantly, disability. It is also argued that monetary thresholds are prone to abuse in that victims will pad their medical expenses in order to reach the threshold and gain access to non-pecuniary general damages.[37] In United States jurisdictions, padding can take place in the number of visits to the hospital or the doctor's office and in the fee charged. Even though monetary thresholds have been relatively unsuccessful in the United States, it might be argued that they would work better in Ontario where one potential source of abuse is eliminated by the O.H.I.P. fee schedule and the ban on extra billing.

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[34] Puerto Rico. See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985). We have counted Puerto Rico as a "state" for this calculation.

[35] District of Columbia, Florida, New York and Michigan.

[36] Colorado, Connecticut, Georgia, Hawaii, Kansas, Kentucky, Massachusetts, Minnesota, New Jersey, North Dakota and Utah.

[37] For an opposing view, see the Rand Corporation study by Hammitt & Rolph, "Limiting Liability for Automobile Accidents: Are No-Fault Tort Thresholds Effective?" Law & Policy 7, no. 4 (1985): 493; Rolph et al., Automobile Accident Compensation, Vol. 1: Who Pays How Much How Soon?. The authors found no evidence of padding of medical expenses in states with monetary medical expense thresholds. The finding was based upon the absence of a disproportionate distribution of medical losses above the threshold. The finding has been questioned by O'Connell and Joost, "Giving Motorists a Choice Between Fault and No-Fault Insurance," Virg. L. Rev. 72 (1986) at p. 70 on the ground that the Rand study is based on states with

A verbal threshold has the advantage of better defining and establishing the kind of injury for which a victim might be able to sue for non-economic loss, but the general language in which a verbal threshold must inevitably be couched contains its own seeds of difficulty. Words such as "serious", "significant" or "permanent" are not always easy to apply individually and are even more difficult to apply in combination. This raises the concern about the additional costs associated with determining the application of the threshold. The experience (which I discuss below) in Michigan, a state considered by most to have the best threshold system in the United States, is at least a warning signal to those who would opt too readily for a verbal threshold plan.

Is there a principled rationale for a threshold system? What justification is there for permitting some accident victims access to the tort system, but excluding others? Cost and political considerations very much influenced the adoption of the threshold plans in the

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modest medical expense thresholds. O'Connell and Joost argue that in such states claimants may refrain from padding because it is unnecessary.

United States.[38] The Insurance Bureau of Canada proposal is a threshold plan, partly modelled on the Michigan system. It, too, was justified by I.B.C. representatives solely on the basis of cost, a way to provide reasonable compensation and, at the same time, keep insurance premiums from escalating further.[39] Apart from cost considerations, it might be argued that very seriously injured accident victims suffer such a reduction in the enjoyment of their lives that non-pecuniary compensation is warranted in order to provide them with some means of obtaining alternate sources of pleasure or satisfaction. On this theory, less seriously injured victims whose pain and suffering is transitory in nature do not require non-pecuniary compensation.[40]

Even if there is a defensible rationale for a threshold system, there remains the difficult problem of defining an effective and workable threshold. At least three important matters need to be considered. First, the threshold ought to be relatively easy to apply so as to provide a measure of certainty as to whether any particular claim is excluded. Otherwise, the transaction costs associated with determining whether the threshold is met on a case-by-case basis are likely to be excessive.

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[38] It was not just a matter of containing rising insurance premiums. Some argue that large damage claims were kept in the tort system in order to appease the powerful personal injury bar in the United States. Also, thresholds respond to the generally accepted wisdom that the less seriously injured are overcompensated. The constitutionality of threshold and no fault schemes is considered in Chapter 14.

[39] See I.B.C. Submission to the Inquiry; see also Transcript of Hearings, I.B.C. Oral Submission.

[40] See S.D. Sugarman, Serious Tort Law Reform (1987) (unpublished). There is of course much to be said for taking smaller claims out of the court system from an efficiency point of view. Conversely it is no doubt legitimate to say that if there is a public policy in favour of victim compensation, it should be in favour of the seriously injured.

Second, in defining the threshold, there should be some thought given to the number of cases it is felt desirable to exclude from the tort system because of cost considerations.[41] For example, the I.B.C. claims that its proposed verbal threshold of "...death, permanent serious impairment of a body function or serious permanent disfigurement..." would exclude approximately 92% of cases from the tort system.[42]

The third and most important consideration (and it flows from the second) is that there must be an effective cost balance between the degree of restriction in access to the tort system and the level of no fault benefits. If generous no fault benefits are provided, but only relatively few tort actions are excluded, the result will be higher insurance premiums because the savings from reduced tort litigation will not be sufficient to finance the expanded no fault benefits. That is what happened in Pennsylvania. Its threshold plan, introduced in 1975, provided unlimited medical and rehabilitation benefits, together with wage loss payments of $1,000 per month to a maximum of $15,000, all on a no fault basis. At the same time, accident victims could pursue a tort action if medical losses exceeded a mere $750.[43] Because the $750 threshold was rather easily met,[44] the result was an increase in car insurance premiums in Pennsylvania of about 20% per year.[45] Faced with the need to reduce costs, and hence control premiums, the Pennsylvania Legislature in 1984 opted to reduce no fault benefits and eliminate the threshold rather than further restrict access to the courts.[46] Pennsylvania now has a tort add on system similar to that of Ontario.

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[41] The reciprocal but non-cost related point which never seems to be addressed is the percentage of cases deemed serious enough to be let into the tort system. The consistent failure to address this issue reinforces my view that the fundamental rationale for threshold systems is cost.

[42] See I.B.C. Submission, pp. 13-15 and Exhibit II-18.

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[43] See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 46. Pennsylvania No Fault Motor Vehicle Insurance Act, Pa. Stat. Ann. Tit. 40, sec. 1009.101-.701. There was a stricter verbal threshold as well. The monetary threshold was never increased despite inflation.

[44] Hammitt & Rolph, "Limiting Liability for Automobile Accidents: Are No Fault Tort Thresholds Effective?" estimated that the Pennsylvania threshold excluded 72% of cases.

[45] See O'Connell and Joost, "Giving Motorists a Choice Between Fault and No Fault Insurance" at pp. 65-66. The Alliance of American Insurers estimated that pure premiums in Pennsylvania were 53% higher than they would have been without the introduction of threshold no fault. See also U.S. D.O.T., Compensating Auto Accident Victims...Report (1985).

[46] See Pa. Stat. Ann. Tit., sec. 1701-1798. See also U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 46. There was apparently no real social or political interest in changing the no fault system to put it in better balance. It was decided simply to scrap it altogether.

The experience of New Jersey was even worse. Despite unlimited no fault medical and rehabilitation benefits, as well as wage loss payments to a maximum of $5,200, accident victims could sue in tort if medical expenses exceeded $200.[47] The result was an estimated 65% increase in pure premiums (or average loss costs per car) as compared to what the pure premium would have been without the threshold system.[48] Finally, in 1983, New Jersey amended its law. The statute now gives motorists a choice of a medical expense threshold of $200 or $1,500 and offers deductibles of $500, $1,000 or $2,500 for medical expense benefits.[49]

I turn now from these general observations about threshold systems to a more detailed examination of the Michigan system and to a brief discussion of the threshold plans in other American states.

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[47] See N.J. Stat. Ann, sec. 39.6A-8. Hammitt and Rolph estimated that the New Jersey threshold excluded only 48% of claims.

[48] See O'Connell and Joost, at p. 65 citing 1982 data from the Alliance of American Insurers.

[49] See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 36; O'Connell and Joost, at p. 67 have criticized the present New Jersey law and suggest it is still seriously out of balance. Nevada too had an out of balance threshold system. Its threshold plan which went into effect in 1974 provided $10,000 in no fault benefits for each victim but had a tort threshold of only $750 in medical expenses. Sharp increases in insurance rates led to the repeal of the law in 1980. See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 24.

(a) Michigan

Among threshold plans in the United States, Michigan's is often singled out as the most effective.[50] It was commented upon favourably by the Ontario Task Force on Insurance.[51] As I have already indicated, the I.B.C. proposal is modelled on the Michigan system. Accordingly, my staff and I spent considerable time inquiring into the operation of the Michigan threshold no fault law.

The Michigan plan came into effect in 1973.[52] It has a verbal threshold. The threshold is "death, serious impairment of body function, or permanent serious disfigurement".[53] In its application, the Michigan threshold is considered to be the strictest among all American states with threshold plans. It has been estimated that the Michigan threshold has excluded at least 90% of automobile accident cases from the tort system.[54] In turn, no fault benefits are relatively generous, and in fact provide a richer package than any other American threshold plan.

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[50] The U.S. D.O.T., Compensating Auto Accident Victims...Report (1985) set out five criteria by which the effectiveness of a compensation system should be judged: (i) its cost in terms of average premiums; (ii) its benefits to auto accident victims; (iii) the speed with which it pays those benefits; (iv) the percentage of the premium dollar it pays to accident victims as benefits; and (v) the extent to which the system is in balance or not in balance. It would appear that the Michigan system rates higher than all other states according to these criteria. According to the DOT Report, its payment of 55.1 cents of every premium dollar to claimants ranked second to Maryland's 56.0 cents. Professor O'Connell is reported to have testified that Michigan's law is the "best no fault law in the world". See Michigan Trial Lawyers Association No Fault Task Force Brief, May 1987, p. 6.

[51] The only extensive reference to the Michigan threshold no fault plan is in an appendix to the Task Force Report. See Volume II, Appendix 14. The Task Force Report itself approached threshold no fault generally with considerably less enthusiasm. See Ontario Task Force on Insurance, Final Report (1986), p. 80.

[52] Mich. Comp. Laws Ann., sec. 500.3101, effective 10/01/73.

The Michigan no fault benefits include unlimited medical and rehabilitation expenses,[55] replacement of 85% of wage loss for three years to a current maximum of approximately $2,475 per month (the monthly indemnity is indexed to inflation), replacement services losses, survivor's benefits and funeral expenses. Access to the tort system for economic loss in excess of wage loss benefits is permitted whether or not the threshold has been met.[56] Collision damage is paid on a first party basis, save for a $300 deductible for which a so-called mini-tort action is available. The 1985 United States Department of Transportation study concluded that Michigan's no fault law was in balance in the sense that the threshold had reduced tort recoveries by an amount at least equal to the total payment of no fault benefits. The Department of Transportation study concluded, based on statistics computed by the Alliance of American Insurers, that the pure premium rates (as of 1982) were 17% lower in Michigan than they would have been without the advent of the Michigan law.[57]

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[53] MCLA 500.3125(1) provides:

> A person remains subject to tort liability for noneconomic loss caused by his or her ownership, maintenance, or use of a motor vehicle only if the injured person has suffered death, serious impairment of body function, or permanent serious disfigurement.

[54] Hammitt & Rolph estimate 89% of cases are excluded. A 1981 study by AIRAC (All Industry Research and Advisory Committee closed claims study) estimated all but 6% of cases were excluded. One insurer, State Farm, estimated only 6-10% of its new claims contained a potential tort claim (See letter from State Farm to the Inquiry dated June 12, 1987). State Farm has also reported that in 1972, before no fault, it recorded 25.3 bodily injury liability claims per 10,000 insured cars. Under threshold no fault the rate had fallen to 1.9 by 1981. See No Fault Press Reference Manual. Michigan exclusion estimates at approximately 90% are to be compared or perhaps contrasted with the probable exclusion rate which will result if the I.B.C.'s proposed threshold were implemented. Clearly the I.B.C. threshold is more onerous than that of Michigan.

[55] The unlimited medical and rehabilitation benefits in the Michigan law caused problems for smaller insurance companies and led to the creation of a Catastrophic Claims Association to pay all losses above $250,000. See No Fault Press Reference Manual.

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[56] See MCLA 500.3135(2)(c) and Cassidy v. McGovern, 415 Mich. 483 (1982), 330 NW 2d 22.

[57] See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 34 for a summary of the Michigan system. The DOT conclusions on premium reduction have been criticized by Professor Priest, The United States' No Fault Experience and its Export to Canada (1987), a study done for the FAIR Committee. Priest makes the following points: (a) the DOT estimates do not include estimates of the changes in non-auto first party insurance costs that result from the adoption of a no fault plan. The increase on resort to non-auto first party compensation sources may account for the apparent reduction in auto insurance costs; (b) the extent of claim preclusion is not closely correlated with the estimates of no fault cost reduction; (c) the concept of no fault "balance", according to Priest, represents data manipulation because the balance definition makes no reference to the state's threshold level or benefit level.

Michigan's compulsory threshold plan has withstood constitutional challenge.[58] Of more immediate significance for my purposes, the definition and application of the threshold itself has been subject to varying judicial interpretation. In the cases immediately following the enactment of Michigan threshold no fault, the Michigan courts held that the issue of whether a plaintiff's injuries met the threshold was a question of fact for the jury. Only when the court found that reasonable minds could not differ on the application of the threshold did the issue become one of law for the court.[59]

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[58] Shavers v. Attorney General, 267 N.W. (2d) 72 (1978), cert. denied, 442 U.S. 934 (1979). In its decision the Michigan Supreme Court held that the compulsory threshold plan was in fact constitutional but that the rate-making mechanisms were constitutionally inadequate to assure that the required coverage would be available at fair and equitable rates. The Court also determined that Michigan drivers have a right to an explanation of how their individual rates are determined and a way to appeal decisions of insurance companies which they believe treated them unfairly. The Court gave the State Legislature and the Commissioner of Insurance until the end of 1979 to address the shortcomings in the auto insurance market. The result was the Essential Insurance Act which took effect January 1, 1981. That statute was held constitutional in Shavers v. Attorney General, 315 N.W. (2d) 130 (1982).

[59] See Advisory Opinion Re Constitutionality of 1972 PA 294, 389 Mich. 441 (1973), where the Court stated that the threshold of "serious impairment of body function" was language that could be easily understood and implemented by juries. As such, the question of whether an accident victim sustained a threshold injury should be a jury question unless no reasonable minds could differ as to the conclusion. See also, e.g., Harris v. McVickers, 276 NW (2d) 629.

Then, in 1982, in Cassidy v. McGovern,[60] the Michigan Supreme Court rejected its previous decisions and ruled that as a general proposition, the issue as to whether an injury is a serious impairment of body function is a question of statutory construction to be decided as a matter of law by the trial judge, not the jury. Only when there was a material factual dispute as to the nature or extent of the plaintiff's injuries was the matter to be submitted to the jury.[61] In Cassidy, the Court stated that the phrase "serious impairment of body function" was not susceptible to a simple definition; it did not attempt to define the phrase in its judgment. It gave the following important guidelines concerning the threshold:

(i) impairment of body function refers to impairment of an "important body function" [emphasis added];

(ii) while the threshold does not require permanent injury, permanency is relevant;

(iii) the Legislature intended an objective standard that looks to whether the injury affects a person's general ability to lead a normal life; and

(iv) the Legislature intended that the injury be objectively manifested.

Three main reasons were given by the Court for its holding in Cassidy. The phrase "serious impairment of body function" was not commonly used and, accordingly, the Court was of the view that juries would not have a clear sense of its intended meaning; further, in the Court's view, the legislative intent was to reduce litigation in automobile accident cases and this would not be achieved if a trial was required in most cases; and, finally, uniformity as to what constitutes a serious impairment in the Court's judgment could be better achieved by trial judges than by juries.

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[60] 415 Mich. 483 (1982).

[61] For a discussion of the Cassidy decision see R.M. Ransom and G.T. Sinas, "The Evolving No Fault Tort Threshold."

The Cassidy decision undoubtedly had the effect of making it more difficult for plaintiffs to meet the threshold.[62] At the same time, by removing the threshold issue from the jury and allowing it to be determined by a trial judge on summary application, the Michigan Supreme Court likely removed an element of uncertainty from the system.

In January 1986, in DiFranco v. Pickard,[63] the Michigan Supreme Court reversed its holding in Cassidy. The decision in DiFranco returned the question of whether the plaintiff's injuries met the threshold to the jury, as long as it was one on which reasonable minds could differ. The Court in DiFranco also rejected the Cassidy guidelines of "important body function" and "objectively manifested injury", as well as the "general ability to lead a normal life" test. The Court's opinion stresses that the Legislature did not intend to limit recovery of non-economic damages to the catastrophically injured. The threshold "is a significant, but not extraordinarily high, obstacle to recovering such damages".[64]

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[62] The Cassidy decision made it very difficult for any soft tissue injuries to meet the threshold. In the subsequent decision of the Michigan Court of Appeals in Williams v. Payne, 346 NW (2d) 564 (1984), the Court refined the Cassidy test to require that the injury be manifested "in a scientific or medical context" or be otherwise subject "to medical measurement".

[63] 427 Mich. 32 (1986).

One thing was made clear by our inquiries in Michigan. There has been considerable litigation over the application of the threshold. One lawyer told us there are more cases on the threshold issue than on the liability issue since, in most instances, the latter issue is relatively easy to determine. Whatever the merits of DiFranco, the uncertainty generated by that decision has made it almost inevitable that litigation over the threshold will increase. The insurance industry has become increasingly active in its efforts to persuade the State Legislature to do away with DiFranco and to restore the Cassidy standard.[65]

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[64] The Court held that the "serious impairment of body function" threshold contains two inquiries:

(a) What body function, if any, was impaired because of injuries sustained in a motor vehicle accident;

(b) Was the impairment of body function serious. The focus of the inquiry is not on the injuries themselves, but on how the injuries affected a particular body function. Relevant factors are the extent of the impairment, the particular body functions impaired, the length of time the impairment lasted and the treatment required to correct the impairment. An impairment need not be permanent to be serious.

[65] The proposed amendment states:

> A person remains subject to tort liability for non-economic loss caused by his or her ownership, maintenance or use of a motor vehicle only if the injured person has suffered death, serious impairment of body function or permanent serious disfigurement.

There is also a considerable amount of first party litigation, that is, litigation in which an insured sues his own insurers, usually over the non-payment of no fault benefits. This is to some extent to be expected because first party no fault benefits are relatively generous. Where there is more at stake, there is more to fight about. One Detroit law firm has seven lawyers who devote their practices exclusively to first party automobile insurance litigation. Interest penalties do not appear to have been a very effective deterrent to abuse of the first party system.[66]

There are other difficulties with Michigan's compensation regime. Michigan third party liability limits remain very low ($20,000/$40,000) by Canadian standards.[67] Thus, in a system where only serious cases

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> (a) serious impairment of body function means: an objectively manifested impairment of an important body function which affects the general ability to lead a normal life;
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> (b) permanent serious disfigurement means: an injury which impairs the beauty, symmetry or appearance of a person and renders it unsightly, misshaped or deformed in some manner.

The proposal includes a tighter definition of "permanent serious disfigurement" borrowed from the New Jersey statute.

[66] MCLA 500.3142. Overdue payments bear penal interest at the rate of 12% per annum. The amount may be significant to the claimant but is of little financial importance to the insurer.

[67] Where the minimum mandatory limits are $200,000.

("serious impairment of body function") are given a right to recover non-pecuniary damages, a successful plaintiff may well be claiming damages from a defendant who has third party insurance coverage of as little as $20,000. Having a substantially unpaid judgment is of little consolation to the injured.

There is also a significant problem in Michigan with uninsured motorists. It has been estimated that in the Detroit area 65% of motorists are uninsured; this includes motorists who obtain insurance but neglect to pay for it. In the end result, there are likely many more plaintiffs undercompensated or left with unsatisfied judgments than a cursory look at the system might suggest. Those who wish additional protection can of course acquire it through uninsured and underinsured first party coverages. Because third party minimum limits are so low, underinsured coverage is relatively expensive, particularly in urban areas such as Detroit. The high number of uninsured drivers makes uninsured coverage expensive as well.

The Michigan system is not without its virtues. The Michigan plan has performed very favourably in terms of the cost, benefit and balance analysis used by the United States Department of Transportation to analyze the effectiveness of state automobile insurance systems.[68] I was impressed with the way in which the system deals with rehabilitation, particularly in serious injury cases. Encouraged by unlimited first party rehabilitation benefits, a number of special rehabilitation centres have grown up in Michigan. They do a very effective job in an obviously important area. Mediation panels, which have become a regular feature of Michigan's pre-trial procedures, have been very successful and are, to an important extent, responsible for the fact that very few automobile accident cases actually come to trial.[69]

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[68] See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), esp. pp. 65-93.

(b) Other Tort Thresholds

I also examined (in a less extensive way than was the case with Michigan) the threshold no fault systems in Florida, New York, Minnesota and Pennsylvania.[70]

Florida's threshold no fault law went into effect in 1972 with a medical expense threshold of $1,000. After its first year of operation, insurance costs began to rise much more quickly than inflation. There was a general consensus that the principal reasons for the cost increases were that the dollar threshold had been eroded by inflation[71] and that some claimants exaggerated their claims in order to overcome the restriction on the right to sue.

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[69] Michigan's effective use of mediation is unrelated to its threshold no fault plan.

[70] In addition to Michigan, only Florida, New York and the District of Columbia have purely verbal thresholds. Florida and New York changed from a dollar threshold to a verbal threshold in the late 1970s. The District of Columbia was ordered to do so by the United States District Court in Diamond v. District of Columbia. The Court held that the $5,000 medical expense threshold "establishes an arbitrary and irrational classification between accident victims whose medical expenses exceed $5,000 and those whose expenses fall below that threshold amount".

In 1976, the Florida Legislature amended its law to provide a verbal threshold only:

> death, significant and permanent loss of an important body function, injury that is permanent within a reasonable degree of medical probability other than scarring or disfigurement, or significant and permanent scarring or disfigurement.

Florida provides only a maximum of $10,000 per victim in no fault benefits. Given the strictness of Florida's threshold,[72] it is not surprising that the Alliance of American Insurers found a 21% decrease in average loss costs (pure premiums) compared to what they would have been without the threshold.[73]

In 1977, the New York State Legislature abandoned its $500 medical expense threshold. It was thought this threshold would eliminate between 80 and 85% of tort claims; as it turned out, minor personal injury claims exceeded the threshold. The low dollar restriction became a target, encouraging excessive use of medical services and hospital facilities. New York's exclusively verbal threshold came into effect in December 1977.[74] It is considerably more detailed than most verbal thresholds. The language of the New York statute is as follows:

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[71] Most dollar thresholds have not provided for automatic adjustment of the dollar values for inflation (Hawaii is an exception). See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 93.

[72] Although Michigan is generally thought to have the most onerous verbal threshold, in its form Florida's verbal threshold is more stringent than that of Michigan. The crucial difference between the two thresholds is Florida's introduction of the qualifying word "permanent".

[73] See U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 100. In Florida, third party liability coverage is not compulsory. Only first party benefits are compulsory. The Florida no fault law came into being for its own pecuniary reasons. Primarily there was a political and social concern to force people to protect themselves since there was no political will to force drivers to protect others.

> (a) Death, dismemberment, significant disfigurement, a fracture, permanent loss of use of a body organ, member, function, or system, permanent consequential limitation of use of a body organ or member, or significant limitation of use of a body function or system; or
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> (b) 90 days mobility on the part of the victim (during the 180 days following the accident) to perform substantially all of the material acts that constituted his usual pre-accident daily activities.[75]

New York provides no fault benefits to a maximum of $50,000 per victim. The Alliance of American Insurers has estimated a 6% decrease in average loss costs compared to what the situation would have been without a threshold.[76]

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[74] U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 101.

[75] U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 37. The statute sets out the threshold in nine categories. The 90-day disability provision is considered a catch-all to deal with the unusual cases not covered by the eight verbal categories.

[76] U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), p. 37.

Minnesota has a combined monetary and verbal threshold. The monetary threshold was $2,000 until 1978 when it was increased to $4,000. The verbal threshold is "death, permanent disfigurement, or permanent injury". No fault benefits are paid to a maximum of $30,000 per accident victim. The performance of the Minnesota system has been mixed in large part because of the view taken by the courts of "permanent injury". As I understand it, if body function is restricted by as little as 5% and the restriction is found to be permanent, Minnesota courts have held that the permanent injury threshold has been met. As a result, the monetary threshold has become largely irrelevant.[77]

E. COMPREHENSIVE NO FAULT

Another option is to move beyond a no fault plan solely for motor vehicle accident victims and instead provide a more comprehensive no fault plan embracing all accidents. Such a plan may even be extended to cover disability, however caused. A recommendation for a more comprehensive no fault plan along these lines is, strictly speaking, beyond my terms of reference and would in any event require the cooperation of the federal government. Nevertheless, I think it useful to at least identify this alternative and to discuss it briefly in the context of New Zealand, one jurisdiction which has implemented such a plan.[78]

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[77] This information was provided in discussions with Minnesota insurance officials and attorneys.

[78] The New Zealand plan covers accident victims. The father of the New Zealand plan, Owen Woodhouse, proposed a much more ambitious plan for Australia whch would take the

A comprehensive no fault plan may be said to have two distinct advantages over a no fault plan restricted solely to motor vehicle accident victims. The first concerns horizontal equity; the second, coordination of benefits. A no fault automobile insurance plan singles out for favourable treatment a certain class of victim from among the disabled in society generally. The same, of course, may be said for a workers' compensation regime and for that matter Ontario's present add on system of compensating motor vehicle accident victims. It is not always easy to justify or rationalize such unequal treatment. Once reasonably generous benefit levels are set for a particular class of victim, it becomes more difficult to finance an equivalent set of benefits across all of society.[79]

To avoid duplication of benefits, specialized no fault plans must address the often costly problem of coordinating their benefit package with those benefits

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matter beyond personal injury by accident to deal with incapacity arising from sickness and congenital defect as well. See Report of the National Committee of Inquiry, Compensation and Rehabilitation in Australia (1974). The proposal was rejected by the Australian government.

[79] See Sugarman, Serious Tort Law Reform, and Epstein, "Automobile No Fault Plans." See also Franklin, "Replacing the Negligence Lottery: Compensation and Selective Reimbursement," Virg. L. Rev. 53, no. 4 (1967) at p. 777 where the author stated, "I see little reason to single out automobile victims for special treatment. I do not see why, as an initial proposition, today's law should care how a limb was broken, whether by an intentional wrongdoer, a negligent automobile driver, a non-negligent driver, a wall toppled by an earthquake or a fall in the bathtub."

offered by the government's social welfare programs and by private employers' disability plans.[80] Coordination of benefit problems are reduced or eliminated under a comprehensive plan.[81]

The Experience of New Zealand

There is in New Zealand a political and historical tradition of experimental social legislation dating back to the 1890s. For a time New Zealand was known as "the social laboratory of the world".[82] Following the celebrated Woodhouse Royal Commission Report,[83] New Zealand in 1974 abolished the tort action for damages for personal injuries and in its place instituted a publicly delivered comprehensive no fault system of compensation, not only for motor vehicle and workplace accidents, but for all "personal injury by accident".[84] The New Zealand plan is administered by the state-run Accident Compensation Corporation (the "ACC"). The plan is unique in the common law world. Other jurisdictions have schemes for workers or for motorists. None has a compensation system so comprehensive in scope.

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[80] See Sugarman, Serious Tort Law Reform. See also Ison, "The Politics of Reform in Personal Injury Compensation." Professor Ison has for some time argued for replacing the "fragmented way of categorized systems of disability compensation that now exist" with an advanced system of social insurance together with the retention of voluntary life insurance. The New Zealand plan is along the lines of reform he has urged. Professor Ison's version of a comprehensive compensation plan for Canada can be found in "Tort Liability and Social Insurance," U. of T. L.J. 19, no. 4 (1969): 614.

[81] Another issue that is central to compensation plans is funding. There is a debate in the academic literature as to whether general (or even specific) compensation plans should be funded on a basis that internalizes accident costs. See generally Sugarman, "Doing Away With Tort Law" at pp. 636-641.

[82] See R.I. Barker, Accident Compensation - An Antipodean Experiment (1987) (unpublished).

[83] New Zealand. Royal Commission to Inquire into and Report upon Workers' Compensation, Compensation for Personal Injury in New Zealand (1967). Owen Woodhouse, a judge of the New Zealand Court of Appeal, chaired the Royal Commission.

The emphasis of the New Zealand scheme is on the community's responsibility to compensate the disabled person and the latter's right to receive such compensation without regard to fault.[85] As stated in the Woodhouse Report:

> The nation has not merely a clear duty, but also a vested interest in urging forward the physical and economic rehabilitation of every adult citizen whose activities bear upon the general welfare.[86]

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[84] Accident Compensation Act, 1972; see Statutes of New Zealand, 1975, Vol. 2, p. 1409.

[85] The five founding principles of the New Zealand plan are said to be (i) community responsibility; (ii) comprehensive entitlement; (iii) complete rehabilitation; (iv) real compensation; and (v) administrative efficiency. See New Zealand. Officials Committee, Review By Officials Committee of the Accident Compensation Scheme (1986). [Henceforth: Officials Committee Review (1986)].

[86] See L. Klar, "New Zealand's Accident Compensation Scheme." An excellent history of the New Zealand scheme is found in Palmer, Compensation for Incapacity (1979). Palmer concedes that Woodhouse's assessment of the common law was not balanced. He views this as strategic. If the common law remained in any form in New Zealand a comprehensive system of reform was financially unattainable. Palmer also observes that the argument against the common law contained in the Royal Commission Report was largely based on principle. There were almost

The focal point of the scheme is earnings-related compensation (ERC). The plan is intended to replace financial loss rather than to use a social welfare philosophy of assuring a minimally adequate living standard. During the first week of disability, the employer pays 80% of income loss. After the first week, the ACC pays 80% of pre-accident earnings to all earners, subject to an upper maximum which is said to cover approximately 97% of New Zealand incomes. It was fundamental to the Woodhouse recommendation that lump sum payments for non-economic loss (save for minor permanent injuries) should form no part of the scheme.[87] Nevertheless, the 1972 Act provided for modest lump sum payments for non-economic loss for:

(a) permanent loss or impairment of bodily functions to a maximum (as of 1982) of $17,000, measured by reference to a schedule of injuries on the workers' compensation model; and

(b) loss of "amenities or capacity for enjoying life including loss or disfigurement" and for "pain and suffering including nervous shock and neurosis" to a maximum (as of 1982) of $10,000 on the basis of an individual assessment and conceived as a supplement to periodic payments for economic loss.

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no empirical data in New Zealand on who got what, when and how from the common law system. Only modest amounts of information were collected by the Royal Commission itself. See Palmer, Chap. 3.

[87] See Palmer, p. 223.

In the case of fatal accidents, both ERC and moderate lump sum death benefits are payable to dependants. Payments continue as long as the condition of dependency lasts or until age 65. The ACC also provides virtually all medical, rehabilitation and funeral expenses.[88]

The inclusion of lump sum payments for non-economic loss represented a political and, as it has turned out, an expensive compromise. Lump sum payments have resulted in an added cost to the system, and an administrative burden.[89]

The 1972 Act provided coverage for non-earners injured in motor accidents only. The coverage extended to medical and rehabilitation assistance and lump sum payments, but not notional income. In 1973 the New Zealand government extended all the provisions of the Act to non-earners except notional income replacement.[90] Using the language of the Ontario automobile insurance policy, there are no income replacement benefits for the deemed to be employed.

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[88] See L. Klar, A Commentary on the New Zealand Accident Compensation Scheme (1986); see also P.H. Osborne, A Critical Evaluation of Liability Insurance, Paper for Ontario Task Force on Insurance (1986).

[89] See Fleming, The Law of Torts. - 6th ed., p. 375; Woodhouse, "Aspects of the Accident Compensation Scheme," N.Z.L.J. no. 18 (October 2, 1979): 395. Woodhouse also criticizes the lump sum payments as a disincentive to rehabilitation.

[90] See Palmer, pp. 222-223.

Under the New Zealand scheme prior to 1982, the funding of compensation for motor vehicle accident victims came from two sources. If the victim was an earner and was injured in the course of employment, compensation was paid out of a fund financed by a levy on employers and self-employed. For all other motor vehicle accident victims, the money came from the motor vehicle fund paid for by owners largely as part of their annual registration fee and, to a small extent, as part of their licence fee. The pre-1982 funding system meant that part of the accident costs of motoring were externalized. In 1982, the funding basis was changed so that all motor vehicle accident injuries were compensated from the motor vehicle fund.[91]

Although there is statutory authority in New Zealand for motorists to be rated according to accident experience, this has not been done. According to one study, neither the introduction of no fault nor the lack of experience rating has caused an increase in accident rates.[92] There is no doubt, however, that under flat premium rating low risk drivers will subsidize high risk drivers.

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[91] See C. Brown, "Deterrence in Tort and No-Fault: The New Zealand Experience," Calif. L. Rev. 73, no. 3 (1985): 976. One result of the change was a 50% increase in the levy rates in 1984. The 1982 amendments also allowed the ACC to operate either a fully funded or pay-as-you-go scheme; or a system incorporating both approaches. Until 1982, the ACC operated an ostensibly fully funded system. See Officials Committee Review (1986), pp. 86-89.

[92] C. Brown, esp. at pp. 1001-2. According to Professor Brown the available statistics showed no significant increase in motoring activity and no noticeable increase in accident rates following the introduction of the New Zealand plan. In fact, the downward trend in the number of accidents, deaths and injuries that had started prior to 1974 continued and even accelerated after New Zealand adopted the Accident Compensation Act. Brown has noted

Under New Zealand's Accident Compensation Act, there is a four-tiered system of dispute resolution in the event a claimant is dissatisfied with an award. The first level is an informal re-examination by the ACC; the second level is a formal hearing by a review officer of the ACC; there is then a further right of appeal to the ACC itself; and, finally, an appeal to the court. The most common issue reviewed at all levels is the entitlement to and quantum of lump sum compensation for non-pecuniary loss.[93]

It would appear that, in several respects, the New Zealand scheme has worked well. The ERC is quite generous; according to one authority, claims are processed relatively quickly and administrative costs have been kept relatively low.[94]

In other respects the system has apparently not worked as well. It is generally thought that the system has not

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that other factors such as compulsory seat belt laws, stricter drunk driving laws and enforcement measures, the energy crisis and recession, have made an assessment of the New Zealand accident rate somewhat uncertain.

[93] Osborne, at pp. 35-42.

[94] Osborne, pp. 40-41. See also Klar, Speech to Advocates' Society (1986). There is general agreement that the New Zealand plan has not been effective in accident prevention. The system of penalties in the legislation has never been used. The system of rewards last used in 1984/85 amounted to less than 1% of the total levies collected. Even Professor T.G. Ison, a leading advocate of comprehensive no fault, has been critical of New Zealand's accident prevention efforts.

performed to its potential in either the area of rehabilitation or accident prevention. These two activities have been under-funded with the result that advantage has not been taken of the opportunity for coordinated effort that the system offers. Further, in some cases, an adversarial relationship has developed between the victim and the ACC. This is exacerbated by government pressure to control costs.[95]

In 1985, a Committee of Officials was established to review the operations of the New Zealand scheme. The Committee reported in August 1986. Among its principal conclusions was that the financial viability of the current scheme was open to question given the massive cost increases in compensation, leading to a much more rapid rundown in reserves than originally forecast. In the words of the Committee's Report "the committee is firmly of the opinion that the scheme cannot continue in its present form". It recommended the abolition of lump sum payments and was in favour of excluding those with minor injuries from the system.[96]

Another problem which has surfaced has its origins in the design of the original system. The scheme began with a built-in inequity. It applied to accident victims but not to victims of illness or congenital defects. Many in New Zealand contend that if compensation is the dominant purpose of the scheme there is no reason in principle to single out accident victims.[97]

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[95] Osborne, at pp. 39-40.

[96] Officials Committee Review (1986), Klar, A Commentary on the New Zealand Accident Compensation Scheme (1986).

Quite apart from the equity issue, administering an accident compensation scheme often requires drawing difficult distinctions between "accident" and "disability".[98] Woodhouse, the architect of the scheme, had wanted a plan universally applicable to all disabled, but the New Zealand government concluded such a plan was not affordable. Now the disparity in the treatment of victims of accidents and victims of illness has become quite marked.[99] The Officials Committee considered whether to extend the scheme in its present form to cover all disabled, but concluded it was not a feasible option because of cost.[100]

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[97] The Ontario Task Force on Insurance recognized this in its medium and long-term recommendations. Its medium-term recommendation was for a universal accident compensation plan; its long-term recommendation, which it indicated was "...logically compelling" but realistically unattainable in the short to medium term, was for a universal disability compensation program. The Task Force recognized that "universal disability may have to await a much wealthier economic base for its implementation and also a complicated process of rationalization between federal and provincial authorities and private insurers..." See Ontario Task Force on Insurance, A Pre-Publication of the Final Report (1986), Vol. I, pp. 104-5.

[98] See Sugarman, "Doing Away With Tort Law."

[99] New Zealand does have social welfare provisions for victims of disease, but they are less generous. Professor Ison found that victims of disease in New Zealand at times feel demoralized because they are treated worse than accident victims with whom they often come in contact in hospitals and rehabilitation centres. See T.G. Ison Accident Compensation: A Commentary on the New Zealand Scheme (1980), p. 22.

The Committee also considered the no fault concept itself, although this was for practical purposes beyond its mandate.[101] The Committee questioned "...to what extent it is still relevant that many accidents are suffered through specific wrongdoing of other individuals". The Committee further recognized that the notion of "justice to the victim" was still important as a basis of policy in New Zealand. To the extent that this reflects a concern about treating innocent victims and wrongdoers in the same way, it does not appear that there has been any response within the plan.[102]

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[100] The Officials Committee Review indicates that the disparity reflects different historical developments and philosophies. Accident compensation had its origins in common law damages for personal injury and in worker compensation legislation. By contrast the philosophy underlying sickness benefits was that of universality based on need and funded from general taxation.

[101] The Committee's mandate was to accept the five founding principles of the plan which embraced the no fault concept.

[102] Officials Committee Review. Concern over fault and fairness are evident within the system. Two examples will suffice. First the New Zealand Court of Appeal has held that an action for exemplary damages may be maintained by a victim against an injurer where the latter inflicted intentional harm on the former. See Donselaar v. Donselaar, [1982] N.Z.L.R. 97; second, many New Zealanders were offended when a man convicted of the murders of two women and serving a life sentence was compensated by the ACC for injuries suffered in an attempted escape from prison. See Klar's Speech to the Advocates' Society, pp. 9-10. Another issue is whether a universal compensation scheme should pay for an individual who chooses to engage in reckless activities. See Trebilcock, Where Do The Bucks Stop?

One concluding observation on the New Zealand plan is that it must be viewed in its social and cultural context. New Zealand has long been a relatively socialistic country with broad social insurance programs already in place. Like Sweden, New Zealand has a small relatively homogeneous population, perhaps more receptive than other countries to re-distribution of income plans. Even New Zealand's neighbour, Australia, has rejected a New Zealand-like plan which was drafted by a team that included, at the invitation of the Australian Government, the drafters of the New Zealand law. Further, in Great Britain, a royal commission headed by Lord Pearson, after an extensive inquiry, rejected the New Zealand approach.[103]

F. OTHER COMPENSATION PROPOSALS

There have been countless proposals to change our way of compensating accident victims. I obviously cannot discuss them all. I propose to refer briefly to the writings of Professors O'Connell and Sugarman in the United States and Professor Ison in Ontario. Their proposals are, although different, representative of the main directions of change proposed in the last quarter century.

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[103] Palmer, Compensation for Incapacity; Fleming, The Law of Torts. - 6th ed., pp. 376-7. The proposed Australian plan went beyond the New Zealand system in seeking to include those disabled by illness and congenital defects. The Australian proposals were opposed by the insurers, the lawyers, the trade unions and four of the six state governments. See Palmer, p. 174.

Without doubt, the leading American proponent of no fault in the last 20 years has been Jeffrey O'Connell, now professor of law at the University of Virginia. The landmark text Basic Protection for the Traffic Victim, co-authored by Robert Keeton and O'Connell and published in 1965, became a catalyst for the various threshold no fault schemes enacted in several American states in the early 1970s.

O'Connell has advanced a number of quite different no fault proposals over the past two decades. In what follows, I summarize some of his main proposals.

In Basic Protection for the Traffic Victim, Keeton and O'Connell embraced what was essentially a monetary threshold scheme. The principal features of the Keeton/O'Connell proposed Motor Vehicle Basic Protection Insurance Act were as follows:[104]

(a) If tort damages for pain and suffering did not exceed $5,000 and other tort damages principally for economic losses did not exceed $10,000, first party basic protection benefits were to replace any tort action. In cases of more severe injury, the tort action was preserved but the recovery was reduced by these same amounts.

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[104] For details of the model statute see Basic Protection for the Traffic Victim. At the time of the writing of this book, Keeton was a Harvard law professor. He is now a judge.

(b) Basic protection benefits were to be paid on a first party basis without regard to fault.

(c) Basic protection benefits were to be limited to economic loss and included net income loss and reasonable expenses incurred. The benefits were to be extended to survivors.

(d) Insureds could purchase optional added protection coverage for non-pecuniary (pain and suffering) loss and insurers were authorized though not generally required to provide such coverage.

(e) Property damage was excluded from the basic protection plan.

In The Lawsuit Lottery published in 1979, Professor O'Connell recommended a scheme of elective first party no fault insurance for all accidents.[105] The proposed scheme would work as follows: an insurance company would offer its insureds no fault economic loss coverage in increments of $10,000 up to any amount. Nothing would be paid for non-economic loss, nor would payment be made for losses already recovered from another source. In return for this guarantee of no fault benefits, the insured would transfer to his insurance company his entire fault-based claim against any at-fault third parties. The insurance company would agree to pay the insured for his economic losses in excess of his no fault coverage out of whatever amount the company could recover in a third party claim.

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[105] In 1975, Professor O'Connell proposed third party elective no fault insurance.

The transfer of the fault-finding claim to the no fault insurance carrier would have to be made at the time the no fault coverage was obtained, that is, prior to any injury to the insured. While the plan was elective, Professor O'Connell suggested that there was a strong public preference for the certainty of payment for out-of-pocket losses caused by an accident over a "gamble" for payment of economic and non-economic losses.

In the last few years, Professor O'Connell has expanded his concept of giving accident victims a choice between securing compensation for economic losses and medical expenses on a no fault basis and waiving their rights to tort claims or instead waiving these no fault benefits and pursuing a law suit for the full tort measure of damages.[106] In the motor vehicle accident context, Professor O'Connell observes that motorists today do not have a choice between fault and no fault insurance. The motorist in a tort state cannot purchase no fault insurance. The motorist in a threshold state cannot reject no fault benefits or law suit restrictions in favour of traditional insurance.[107] And the motorists in a tort add on system cannot opt for restrictions on law suits.[108]

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[106] See e.g., J. O'Connell, 'A "Neo No Fault" Contract in Lieu of Tort: Pre-accident Guarantees of Post-accident Settlement Offers,' Calif. L. Rev. 73, no. 3 (1985): 898; J. O'Connell and B. Kelly, The Blame Game (1987); O'Connell and Joost, "Giving Motorists a Choice Between Fault and No-Fault Insurance," Virg. L. Rev. 72 (1986): 61.

[107] Other than Kentucky.

O'Connell's most recent proposal advanced in 1986 is to give drivers a choice between purchasing first party no fault insurance and third party liability insurance. If two drivers, each with first party no fault insurance, are in an accident, then each looks to his own insurer to cover his losses. If two drivers with third party coverage are in an accident, recovery would be governed by tort law and third party insurance coverage. The more difficult situation is a collision between two drivers, one with no fault coverage and the other with third party liability coverage. In that situation, the driver with no fault coverage would recover under his no fault policy from his own insurer and would not, even if negligent, be liable for the other driver's losses. In order to permit the driver with third party coverage to recover his tort compensation, O'Connell proposes a compulsory automobile insurance "connector" in the form of modified uninsured motorist coverage. The driver with third party coverage and the "connector" would then look to his own insurer for tort damages if negligence on the part of the other driver could be proved.[109]

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[108] O'Connell and Joost, at pp. 62-63. The choice O'Connell offers is between tort and no fault. He does not consider a system such as Ontario's which combines tort recovery with no fault benefits.

[109] O'Connell and Joost, pp. 77-82.

As Professor Trebilcock noted,[110] Professor O'Connell has likely advanced his elective scheme at least in part out of recognition of the political resistance to further enactment of threshold or pure no fault schemes. O'Connell undoubtedly believes that, given a choice, most motorists will prefer the no fault option. However, he seems prepared to recognize that not all motorists may do so.[111] In doing so, he seems to recognize that the tort system, with all its imperfections, may be difficult to dislodge.

In a series of recent articles, Professor Stephen Sugarman, a law professor at the University of California, presented a new proposal for injury compensation which he considers to be a "substantial first step" in the direction of providing most of the population with reasonable first party income protection and medical benefits.[112] My staff and I had the opportunity to discuss this proposal with Professor Sugarman when he attended a tort/no fault discussion group convened by the Inquiry in Toronto on May 15, 1987.[113]

Sugarman rejects the tort system as "an intolerably expensive and unfair system of compensating victims". He also rejects no fault accident compensation plans, directed to particular groups, first because they give preferential treatment to one class of victim among society's disabled and, second, because specialized no fault plans are inefficient in dealing with collateral source payments and in avoiding duplication of benefits.

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[110] Trebilcock, Where Do the Bucks Stop?, at pp. 22-23.

[111] O'Connell and Joost, pp. 82-83.

[112] See Sugarman, "Doing Away with Tort Law"; Sugarman, Serious Tort Law Reform (1987) (unpublished).

[113] See Chapter 3.

Sugarman makes particular reference to automobile no fault plans. While arguing these plans are an improvement over the tort system, he suggests that if these plans pay only for otherwise uncompensated losses, then they are not a very good purchase for people with other sources of protection;[114] whereas if automobile no fault benefits are primary, then complicated reimbursement arrangements with employee and other benefit plans must be established.

This reasoning leads to the basic direction of Professor Sugarman's reform proposal: rather than layering in another new scheme of benefits, he argues for improving the existing mechanisms for income and medical expense protection. Sugarman's basic proposal involves distinguishing between short-term and long-term disabilities. He would improve the existing employee benefit and social insurance system for persons disabled for whatever reason for less than six months, and for persons who are disabled longer, for their first six months of disability. Access to the tort system would be restricted to those suffering a serious disfigurement or impairment or to those who had injuries causing more than six months of disability.

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[114] In light of this consideration, Epstein suggests that the real benefit that accrues from losing the right to be a tort plaintiff is the elimination of the risk of being a tort defendant. See Epstein, "Automobile No Fault Plans: A Second Look at First Principles."

The central details of Professor Sugarman's reforms are as follows:[115]

(i) A generous temporary disability insurance program (TDI) for short-term income replacement. The TDI plan would provide benefits on an after-tax basis equal to 85% of the employee's pre-disability earnings. The maximum earning level to which the TDI would be applicable would be twice the average weekly wage. Non-earners disabled for six months or less would not benefit from the program. The TDI program would cover work as well as non-work disabilities and there would be a seven-day waiting period. The TDI payments would be funded by employer and employee contributions.

(ii) Employers would be required to provide their employees with paid sick leave benefits according to a reasonable schedule which would take care of the first week's disability.

(iii) Unlimited medical health care and rehabilitation benefits would be provided.

(iv) Tort victims would not be able to sue for the first six months of lost income. Any short-term income loss not replaced by mandatory sick leave and TDI plans would have to be borne by victims who would of course be free to make their own private arrangements for additional protection.

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[115] They are set out in his article on Serious Tort Law Reform.

(v) There would be a threshold for access to the tort system for non-pecuniary loss which would require more than six months' disability or serious disfigurement or impairment. Sugarman attempts to make a principled case for a threshold; what he seeks to remove from the tort system is transitory pain and suffering and what he seeks to preserve are those cases in which there have been serious consequences to the victim's body. His proposal (based on Michigan estimates) is intended to eliminate law suits for non-pecuniary loss in at least 90% of the cases.

(vi) A cap on general damages of $150,000 indexed every five years for inflation.

(vii) The abolition of the collateral source rule.

(viii) The abolition of the contributory negligence rule.

The essence of Sugarman's proposal is a comprehensive disability plan with total coordination of all existing benefits (including government benefits) and threshold access to the tort system for more serious injuries. Sugarman is opposed to specialized no fault compensation plans. In this he is not alone. There are other academic writers who favour comprehensive disability plans but who would go farther than Sugarman and would eliminate all access to the tort system. In Ontario they include

Professor Ison who has written a number of thoughtful books and articles supporting comprehensive compensation. Professor Ison, who has an intimate knowledge of the New Zealand compensation plan, favours a similarly structured plan but extended to all who are disabled. I think Professor Ison is correct in concluding that such a plan cannot be delivered by the private sector but has to be delivered publicly. The adoption of such a plan in Canada would require complete federal/provincial cooperation.

One of the most forceful criticisms levelled at the existing tort system relates to the less serious injuries, the minor claims. Costs associated with investigating and defending these claims are out of proportion to the modest worth of the claims themselves. In the result, insurers often offer to settle these claims for more than their probable trial assessment value. This is essentially a business decision which all too often results in a $500 claim being settled for $1,500. Application of the collateral source rule extends the overcompensation in those cases where collateral source payments are available to the plaintiff.

One proposal to address this problem which was put forward by several persons with whom I spoke involves deducting a flat amount from the non-pecuniary damage portion of the tort claim. If, for example, the deductible was $5,000, then any award for pain and suffering would automatically be reduced by that figure. If the award, but for the deductible, would have been $20,000, then the actual award would be $15,000. If the award, but for the deductible, would have been $3,000, then the victim would not receive anything for non-economic loss. An exception could be made on grounds of social policy so that the deductible would not apply to awards for the catastrophically injured.

The practical effect of this deductible (assuming reasonable no fault benefits) would be to exclude minor injury claims worth $5,000 or less from the tort system.[116] The deductible would operate as a threshold. Proponents of this proposal state that it has the advantage of certainty and is less capable of abuse than the monetary thresholds favoured by American jurisdictions.

Finally, I have considered the general structure of insurance compensation plans used in Great Britain, West Germany, Switzerland, France, Sweden, Denmark and Israel. Some I have regarded as unworkable in Ontario; others as too costly. For example, in Great Britain and in Switzerland, automobile accident compensation is paid only through the tort system. There is no evidence of any serious inclination in either jurisdiction to change the system. For reasons more fully developed in Chapter 12, I do not think it is appropriate to resort only to tort law to compensate motor vehicle accident victims. I regard the Swedish system as too costly; and I do not regard the West German combination of absolute and negligence-based liability as representing an improvement to Ontario's current system.

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[116] It would likely also exclude many claims just above $5,000 because claimants would be unlikely to assert them given the small amounts at stake.

CHAPTER 12

RECOMMENDED SYSTEM OF COMPENSATION

A. INTRODUCTION

All submissions have been considered, public hearings have been held, the relevant literature has been read and the research is complete. I now, therefore, turn to consider how those injured in motor vehicle accidents in Ontario should be compensated.

As I stated in Chapter 2, I regard the interests of those who suffer injury and loss as a result of motor vehicle accidents and the interests of Ontario's drivers required by law to purchase automobile insurance, to be of primary concern.

Premiums, bodily injury loss costs, transaction costs, the tort system, no fault, threshold no fault, public insurance, gross-up, prejudgment interest, the Family Law Act, collateral source payments -- the list goes on -- obviously raise important issues; but in the final analysis value judgments have to be made. They have been, and they are mine.

There are those who approach the "tort system"/no fault debate (to say nothing of the private sector/public insurance debate) as an article of faith. Others would limit the perimeters of the debate to a study of economic efficiency. Some have suggested systemic changes should only be recommended upon acceptance of convincing evidence that some other system is clearly superior to our present system. Still others reject our present system out of hand because of the inefficiencies of the tort system. If common ground can be found, it is located in the pervading recognition that first party no fault accident benefits should be increased.

Although not necessary, it is at least interesting to identify the no fault debate's major players. Not all, but a majority of the automobile insurance industry favours some form of no fault compensation scheme. The I.B.C.'s highly visible proposal urges what is referred to in Chapter 11 as "threshold no fault". It has become reasonably clear to me that the unstated preference of a number of insurers is for pure no fault rather than threshold no fault. Some insurers, clearly a minority, prefer our present system, with increased no fault benefits.

Academic opinion clearly favours no fault compensation. At least on this issue, academics cannot be accused of talking only to themselves.[1] I think I am on safe ground in stating that the preference of a majority of academics is for a comprehensive disability compensation plan.[2] Some academics nevertheless recognize that this goal may be impractical, given political realities such as major federal/provincial jurisdictional conflicts and funding.[3]

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[1] See, for example, Globe & Mail (March 20, 1987) where Professor Hutchinson's comment "Lawyers' Concern is Really for Profit", and Professor Steven Wexler's comment "Pros and Cons of Fault and No-Fault" consume an entire page.

[2] See generally T. G. Ison; Alan Hutchinson, "Beyond No-fault," Calif. L. Rev. 73, no. 3 (1985): 755; See also Deborah Coyne, "Compensation Without Litigation," Policy Options April 1987):3.

Lawyers' groups and others emphasize individual responsibility, fairness, the tort law's capacity to deter and to provide individualized compensation; they urge resistance to anything that will in any way erode those values and rights.[4]

Both the Bar and the insurance industry can properly be accused of being stakeholders; both have an obvious vested interest in the final disposition of what Ontario's motor vehicle accident compensation system is to be. I do not regard that as a basis upon which to ignore the views of either. Both have a capacity to provide insight into the practical consequences of suggested changes. The existence of vested interest should affect the weight of the evidence, not its admissibility.

Academic interest in the tort system and in compensation of the injured has been intense. The criticism that academics have often ignored practical matters such as cost is, in my view, valid; once again that should be a matter of weight not admissibility.

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[3] Professor Craig Brown articulately set out this position at a Toronto Conference, Tort Law in Crisis, February, 1987. Professor Brown was instrumental in preparing the I.B.C.'s submission to this Inquiry.

[4] The Bar was officially represented by the Canadian Bar Association and the Advocates' Society and unofficially by FAIR (Fair Action in Insurance Reform).

Through the canyon separating those who favour the demolition of the tort system and those who favour its renovation drive most of Ontario's insured motorists, largely unaware of what the tort system is, and what no fault insurance means. I think it is because of this general lack of public awareness that the no fault/tort law debate has not been a significant concern to consumers. The destiny of the tort system has elicited letters to the editor, but not self-immolation. Ontario's drivers, those most affected by the no fault debate, have not been major participants in it. The relative neutrality of most of the driving public has tended to emphasize (and perhaps overemphasize) the specific views of the insurance industry, academics, and the Bar.

Before turning to the criteria by which any motor vehicle accident compensation plan should be evaluated, I want to set out what I mean by no fault and threshold no fault. In the motor vehicle accident context, a no fault form of compensation plan is a plan in which an injured person's entitlement to compensation is neither reduced, nor affected, by that person's driving conduct. In a pure no fault compensation environment, a person injured in a motor vehicle accident will be paid the plan's stipulated benefits without regard to driving conduct, and will have no independent right to sue for damages based on fault.

Threshold no fault pays prescribed compensation without regard to fault, but permits an injured person to seek compensation through the tort system for pain, suffering and loss of enjoyment of life (non-pecuniary general damages), if the injuries, or in some cases, injury-related expenses, pass a pre-determined threshold.[5] The idea is to pay basic no fault compensation to all those injured in motor vehicle accidents without regard to driving conduct, i.e., fault, and to permit claimants in more serious cases to resort to tort law and the courts for compensation for non-pecuniary general damages.

No fault plans often contain exclusions which eliminate or reduce an insured's entitlement to benefits. Some exclusions are related to driver conduct (e.g., impaired driving). This is for the most part a social policy matter. Such exclusions dilute the extent to which compensation plans containing them can truly be viewed as no fault plans.

Having dealt generally with what no fault is, let me briefly set out what it is not. There is no conceptual relationship between no fault insurance and government insurance. That point must be emphasized because it has become increasingly obvious to me that no fault insurance is equated with government insurance, and government insurance with no fault insurance. Many seem to think that Manitoba, Saskatchewan and British Columbia (all of which have government-delivered automobile insurance) have no fault insurance plans. None of those provinces, in fact, has a no fault insurance plan, any more than Ontario, which delivers insurance through the private sector, has no fault insurance. The three western provinces may be contrasted with Quebec which has both no fault automobile insurance and government insurance.

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[5] Depending on design, a threshold no fault plan may provide access to the tort system for excess economic loss.

Ontario, Manitoba, Saskatchewan and British Columbia have structurally similar automobile insurance/compensation plans. No fault benefit levels differ, but not to any great degree. In all four provinces and in Alberta, Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland, an injured person may seek damages from a third party based on that third party's alleged fault. There is no restriction in access to tort law for compensation in any Canadian province, except Quebec, where the restriction is complete. In all Canadian provinces save Quebec (including, I emphasize, Manitoba, Saskatchewan and British Columbia), a recovery effected through resort to tort law is reduced by the no fault benefits paid to the claimant.[6]

Before I deal with evaluation criteria and competing compensation systems, I should make some general reference to what ails our present insurance/compensation system.

B. THE PROBLEMS

It seems to me to be sensible to turn briefly to the important, but little understood, issue of why there are difficulties with automobile insurance and in some respects with our compensation system. That can only be accomplished by identifying the problems.

The Ontario Task Force on Insurance concluded that the massive problems in liability insurance were not found in automobile insurance.[7] This conclusion is correct. Nothing close to a causal link between the liability insurance crisis and existing problems in automobile insurance was established by the Ontario Task Force on Insurance.

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[6] In Ontario, the reduction is not only for no fault benefits paid, but no fault benefits which are available. See Stante v. Boudreau.

The Task Force Report did refer to the increase in the average number of bodily injury claims per insured car and the increase in the average cost of bodily injury claims. In dealing with increased bodily injury claims costs, the Task Force Report stated:

> ...this steady upward drift must be addressed now. It reflects dissatisfaction with the accident benefit program, which is contributing to increased use of the expensive tort/litigation system. The cost of the system is increasing, a trend that may soon press against the limits of affordability and acceptability.[8]

Although the Task Force Report identified both the increasing number and the increasing cost of bodily injury claims as problems, it is clear that the Report viewed the steady increase in average bodily injury claims costs as the primary problem. The Task Force was also concerned about transaction costs and particularly defense legal costs.[9] The average cost of a bodily injury claim includes the claim and claims adjustment expense; claims adjustment expense includes defense legal costs. Double counting should be avoided, if not in the interest of rhetoric, at least in the interest of accuracy.

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[7] Ontario Task Force on Insurance, Final Report (1986), p. 21.

[8] Ontario Task Force on Insurance, Final Report (1988), p. 73.

[9] Ontario Task Force on Insurance, Final Report (1986), p 30.

There are other problem areas. At the premium level, there is the issue of affordability. Premium levels have increased dramatically over the past two years. Automobile insurance is compulsory and is theoretically available to all through either the regular or the residual markets. Nevertheless, for some, affordable insurance is not available. In making that statement, I think of some young drivers, taxi operators and those that for sometimes inexplicable reasons are unable to secure automobile insurance through the regular market. While the availability of insurance through the residual market is secure, there is such a substantial difference between average weighted regular market premiums and residual market (Facility Association) premiums, that questions of affordability and fairness arise, particularly for those drivers who should be insured in the regular market.

I approach the affordability issue somewhat cautiously. I take it no further than to state that because automobile insurance is compulsory, it must be made available at a price consistent with sound insurance principles. I do not think it is appropriate to impose an obligation on the government or on the private sector to make automobile insurance affordable to all, particularly those drivers who by their conduct deserve to pay high premiums. Automobile insurance is compulsory, driving is not.

There is a pervading concern about the fairness of premium differentials; these differentials occur as a result of the application of the classification system and individual insurers' underwriting policies. For example, some suggest premiums for young male drivers and taxis are unfairly high, even if premium levels for each are statistically justified. Others suggest those premiums are too high and are not statistically justified. That problem was discussed in some respects in Chapter 6, and will be further discussed in Chapter 15. For now, I note that given a reasonable classification system, it is difficult, and close to impossible, for the private sector to permit premium levels for established cells within the classification system to fall below levels which are actuarially sound. I emphasize that point because of repeated statements by some that premium levels for certain identified driver groups are unduly burdensome, notwithstanding the fact that those premium levels may be perfectly sound when assessed on an actuarial basis.

As has been stated earlier, another problem area is marketing; the consumer should have better access to information and, hence, enhanced capacity to choose. From the consumer's standpoint, the intensity of competition within the private sector has been dulled by the manner in which automobile insurance is marketed. From the insurer's standpoint, business acquisition costs (eg., brokers commissions) in the private sector are high. I view this as a problem area as well.

There is also the very serious problem of the delivery of benefits, particularly at the first party level. That problem has been discussed in Chapter 5.

These are, of course, compensation problems. They include cost, uncertainty, delay and the uncompensated. Most, if not all, of these compensation-related problem areas are reflected in criticisms of the tort system.

Finally, I think it must be said that although there are a number of problem areas, neither the automobile insurance system nor the compensation system is crumbling. The patient may not be entirely well; vital signs, however, are intact.

C. EVALUATION CRITERIA

Before dealing with competing compensation systems, it is necessary to identify the criteria against which I think those systems should be assessed. I consider the following to be reasonable evaluation criteria.

(a) Compensation

Compensation is the essence of my undertaking as the name given to this Inquiry implies. I include within this evaluation criterion the issues of eligibility and quantum, that is, who will be compensated by the system and in what amount. This exercise will identify those who may be undercompensated within any compensation system. I also take into account the timeliness and certainty of the payment of compensation, particularly for economic loss.

(b) Rehabilitation

Any reasonable compensation scheme should be structured to enhance rehabilitation in three general ways. Rehabilitation must be reasonably funded; funds must be made available so that rehabilitation can commence at an optimal time; and eligibility for payments must continue over a sufficiently long time period to permit the effective rehabilitation of the insured.

(c) Cost Efficiency

The public is legitimately concerned about the quantum of automobile insurance premiums and is entitled to know the general cost implications of alternative compensation systems. The cost efficiency of any system is something which must be taken into account, (and I cannot resist noting almost never is), when compensation/insurance issues are debated.

(d) Incentives/Deterrence

A compensation system should provide incentives for appropriate driving behaviour and deter unacceptable driving behaviour. Deterrence-related gains or losses which may result from the implementation of any particular system of motor vehicle accident compensation should be taken into account.

(e) Fairness

It is important that the conceptual underpinnings of any compensation plan take into account basic notions of fairness and justice.

(f) Insurance Considerations

The design of any workable compensation plan must have regard to the fact that benefits will be paid through first or third party insurance, delivered either by the private sector or by a public monopoly.

(g) Constitutionality

Any compensation scheme must be lawful. A number of relevant constitutional issues will be discussed in Chapter 14.

D. ASSESSMENT OF THE ALTERNATIVES

In assessing the alternatives, I should state at the outset that I have not considered comprehensive compensation plans as a viable option. The scope of this Inquiry is restricted to motor vehicle accident compensation. I have no mandate to design a comprehensive compensation package however rational it may be; nevertheless, I think that the design of a compensation scheme for motor vehicle accidents should take into account the prospect of the eventual development of a comprehensive compensation scheme. Benefits in the motor vehicle accident compensation scheme at the first party level should not be set so high as to preclude the eventual integration of that scheme into a more comprehensive compensation package.

We are probably political light years away from adopting a comprehensive accident or disability compensation plan. It seems to me to be necessary that any changes in the motor vehicle accident compensation system be capable of almost immediate implementation. While I endorse an assessment of a comprehensive compensation plan, it is not a workable option given my mandate and the requirement for early implementation. Nevertheless, a comprehensive compensation plan for accidental injuries, or beyond that a universal disability program should be given further consideration at the federal and provincial levels.

The workable compensation options are pure no fault, threshold no fault (in its many potential forms) and an add on compensation plan (with co-existing no fault benefits and tort system access).

In a pure no fault system, insureds have no access to compensation beyond that established by the no fault plan.[10] Compensation is provided without regard to fault, although pure no fault and threshold no fault plans may establish exclusions which limit eligibility for no fault benefits. The idea in a pure no fault compensation plan is to compensate all those injured in motor vehicle accidents on the same basis. The emphasis is on economic loss, although pure no fault plans often provide modest non-economic compensation.[11]

Benefit levels in pure no fault and threshold no fault can be set at any level that cost permits. In threshold no fault there is a restricted right to sue, with the result that a threshold no fault system is exposed to costs not encountered in pure no fault. This tends to result in no fault benefits in threshold plans being more modest than in pure no fault plans.

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[10] Some insureds, of course, may have access to collateral source payments.

[11] For example, the motor vehicle accident no fault compensation scheme in Quebec and New Zealand's comprehensive accident compensation scheme both provide for some non-economic loss compensation.

There is no doubt that both pure no fault and threshold no fault plans can be constructed so as to have the capacity to deliver prescribed benefits periodically, as entitlement arises or continues. Tort system delay is avoided. Rehabilitation goals are clearly better served through first party insurance. Nevertheless, it is clear that if premiums are to be controlled, cost efficiencies are crucial to no fault plans. The money has to come from somewhere. If accident victims are to be paid full no fault benefits, transaction costs have to be reduced, and to the extent necessary something has to give on the claims side. That something is compensation for pain, suffering and loss of enjoyment of life (non-pecuniary general damages).

In assessing compensation schemes, cost efficiency considerations are important; however, the efficiencies of any compensation scheme must be looked at on a comparative basis. The comparison must be realistic. No useful purpose is served by comparing no fault's cost effectiveness to the tort system's when it is not proposed to resort to the tort system alone for compensating those injured in motor vehicle accidents.

(a) Compensation

From the standpoint of the compensation criterion, both pure no fault and threshold no fault are superior to the tort system. If a system's objective is to compensate, the tort system does not achieve that objective. Those who defend the tort system argue that it has never purported to compensate all those injured in motor vehicle accidents. While that contention is correct, it misses the point. The crucial issue is what the system does from a compensation standpoint. Those at fault receive nothing under the tort system. Those partly at fault receive reduced compensation based on the extent of their contributory negligence.

Tort system compensation is often delayed. Delay is the result of the common law's requirement that compensation be paid in a lump sum. There is an uncertainty about lump sum compensation in that predictions must be made about future losses and those predictions may not always be accurate. To the extent that fault is an issue, there may also be uncertainty as to how that issue will be resolved.

Set against the structural weaknesses of the tort system are the main advantages of no fault compensation plans. In no fault, all those injured are entitled to compensation, at least for economic loss, up to some pre-determined limit. There is little or no uncertainty as to a claimant's eligibility for compensation or, in most instances, the quantum of no fault compensation. Benefits are paid quickly, at least in theory.

(b) Rehabilitation

It is clear to me that rehabilitation is an essential objective of any compensation system and that it cannot be realistically achieved through the tort system. The tort system, involving as it does delayed lump sum compensation, provides a disincentive to rehabilitation. Although the same can be said about periodic payments paid on a first party basis, I think the evidence is overwhelming that rehabilitation must be a first party obligation. Because no fault compensation is delivered on a first party basis and because rehabilitation benefits must be made available without undue delay, the rehabilitation objective is far better served by no fault than tort law. It is in the public interest that all the injured be rehabilitated. The availability of rehabilitation benefits should not be linked to fault. This, however, does not mean that some form of first party no fault rehabilitation benefits cannot co-exist with tort recovery.

(c) Cost Efficiency

Cost efficiency is a major issue in the tort system/no fault debate. Proponents of no fault commonly point to its efficiencies and to the inefficiencies of the tort system. In general terms, this argument is premised on the contention that transaction costs in no fault are less than transaction costs in the tort system. To the extent that this is true, it can be said that a first party no fault insurance compensation plan is more cost efficient than third party tort system compensation.

The usual measurement of efficiency in this area is the percentage of the premium dollar available to claimants in the system; or to put it another way, an assessment of how much of the premium dollar is consumed by expenses.

It must be emphasized that what is actually paid to claimants in any system will depend on the design of the compensation system, accident frequency and accident severity, not expenses. Compensation has to be paid in accordance with the provisions of the compensation system.

This is so however efficient or inefficient the system may be from an expense standpoint.

Furthermore, while we have reasonably solid data as to the tort system transaction costs breakdown, the same evidence is not available on the no fault side. We can at best estimate transaction costs in a pure no fault or threshold no fault plan.

For the purposes of this analysis, an insurer's expenses can be viewed as comprising operating expenses and claims adjustment expenses. That is how insurers characterize expenses. Operating expense includes business acquisition costs (brokers' commissions, etc.), administration expense, salaries, etc. For these purposes, operating expense can also be taken to include 3% of earned premiums all insurers are required to pay in premium tax and the 0.4% of earned premiums insurers pay in licence fees. Claims adjustment expense is regarded as any expense relating to the claims process. The major components of claims adjustment expense are defense legal and adjusters' costs.[12]

I.B.C. data establish that aside from premium tax and licence fees, the insurer's operating expense is approximately 20.9% of earned premium.[13] Claims adjustment expense is approximately 11% of earned premium. This claims adjustment expense estimate is consistent with I.B.C. data, the experience of a major insurer,[14] the 1986 Woods Gordon study and the Inquiry Claims Survey. If the 3.4% for premium tax and licence fees is included, expenses total approximately 35.3% of earned premiums. Thus, approximately 64.7% of earned premiums is available to pay claims in our present system.

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[12] Party-and-party costs paid to claimant's counsel are regarded as being part of claims, not claims adjustment expense.

[13] See Inquiry Resarch Study II. See also Chapter 15, Table 15.2.

It does not seem to me that the insurer's operating expense can be significantly reduced by a conversion to a no fault compensation system. There is no reason to conclude that the insurer's administrative infrastructure would shrink if our compensation system were to change as long as insurance is sold on an individual basis.

There could, however, be reductions in claims adjustment expense. In pure no fault, there would be no need to commit resources to fault determination, except for premium rating purposes. Defense legal costs which account for about 75% of claims adjustment expense[15] would be substantially reduced, but would not disappear, in a pure no fault plan. Some of it would be transferred to the first party (no fault) side. The same can be said about adjuster's expense. Even in pure no fault, disputes over entitlement and quantum will arise. The Quebec experience has confirmed this. In some disputed cases, insurers will have to retain counsel. The legitimacy and extent of injuries will have to be investigated. One insurer has estimated, and I tend to agree, that in pure no fault claims adjustment expense can be reduced by no more than 5%, that is from approximately 11% to 6% of earned premium. Assuming that conclusion to be correct, and further assuming that operating expense remains constant, all expenses in a pure no fault plan would approximate 30.3% of earned premium (operating expense 20.9%, premium tax and licence fees 3.4%, claims adjustment expense 6%). That would leave approximately 69.7% of earned premiums available to pay claims.

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[14] See The Wellington Insurance Company Submission.

[15] See Inquiry Claims Survey transaction cost breakdown.

In threshold no fault, the potential for reduction of claims adjustment expense is minimal. Because serious cases meeting or passing a defined threshold will enter the tort system and because it is the serious cases which attract most of the defense legal expense dollars, it is unlikely that defense legal costs will be significantly reduced in threshold no fault. There will, nevertheless, be some reduction. Adjusters will not have to investigate fault in those cases that obviously will not meet the threshold; but, as is the case in pure no fault, adjusters will still be required to investigate the legitimacy and extent of injuries. At least in those cases falling below the threshold, only the adjuster for the first party insurer will be involved. In cases close to or above the threshold, adjusters for both the first and third party insurers may be involved.

The Ontario Task Force on Insurance briefly compared the tort system and no fault insurance plans on efficiency grounds. The Task Force put it this way:[16]

> Even if all of the other deficiencies described above could be eliminated,

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[16] Ontario Task Force on Insurance, Final Report, (1986), p. 66.

> the final one is the most serious: the inordinate financial cost of continuing to use tort for injury compensation. A large portion of every premium dollar is eaten up by the transactions costs of the tort-insurance system. More than 50 cents of every premium dollar is absorbed in the administrative and legal costs of running the system.
>
> Less than 50 cents of the premium dollar is actually paid out in compensation under tort, compared with 80-90 cents that are paid out under no-tort insurance plans.

The references to the inefficiencies of tort and the efficiencies of no fault referred to above, were included in that part of the Ontario Task Force on Insurance Report dealing with liability insurance and the liability insurance crisis of 1985-1986. When the Task Force dealt with automobile insurance (in Part C of its Report), it provided an expense breakdown which suggests that substantially more than 50¢ of the premium dollar is available to those injured in motor vehicle accidents, if claims adjustment expense is included at approximately 11%. The Task Force breakdown records claims and claims adjustment expense at 64.3% of the automobile insurance premium dollar. If claims adjustment expense (11%) is deducted and profit (2.5%) is ignored, on the Task Force's own data, 55.8% of the premium dollar would be available for claims.[17]

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[17] The Task Force breakdown notionally attributes 2.5% of the premium dollar to profit. Notional profit is not usually included in determining what part of the premium dollar is available to pay claims after all expenses are accounted for.

Although the data establish that more than 50¢ of the premium dollar is available to pay claims, the entire exercise should be approached with caution for a number of reasons. First, claims are a primary, not secondary obligation. If expenses are high, it does not follow that claims are low. Nor can it be said that if expenses are low, claims will be high. Investment income is completely ignored in those studies attempting to determine what part of the premium dollar is available to pay claims. In normal circumstances, in a competitive market, claims and all expenses may well exceed earned premiums. Second, the data referred to by the Ontario Task Force on Insurance in its analysis of the components of the automobile insurance premium dollar overstate operating expense by close to 4%. The data relied on by the Task Force are not current and ignore efficiency improvements. Third, it is assumed, for reasons I do not understand, that automobile insurers' profit at 2.5% should be accepted as a given in the calculation of what the components of the automobile insurance premium dollar are. If anything comes last on the priority list, it is profit. The inclusion of this item distorts the data, particularly if the data are used in a comparison where profit is not taken into account.

There is no specific reference in the Task Force Report as to what expense efficiency was expected of the no fault plan it recommended,[18] but the Task Force's observations on the efficiency of no fault plans generally (as earlier referred to) suggest that it was proceeding on the assumption a no fault automobile insurance plan could return 80-90¢ of the premium dollar to claimants. The suggestion that any compensation/insurance system for those injured in motor vehicle accidents will return 80-90¢ on the premium dollar to claimants must be an error. Even if the 11% of earned premium allocated to claims adjustment expense was totally eliminated (a prospect no one could seriously suggest will occur in any no fault compensation scheme), no more than approximately 75¢ of the premium dollar could be available to claimants under a pure no fault motor vehicle accident compensation plan.

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[18] See recommendations B. 28, C. 3 and C. 4.

It may well be that a Workers' Compensation type plan could return 80-90% of earned premiums in benefits.[19] In that environment, coverage is provided on a group, not individual basis. There are no brokers' commissions. The employer takes care of most of the record keeping. Claims-related expenses are reduced because claims are generally processed by the employer. There is a vast difference between that kind of coverage and the coverage provided by either private or public automobile insurers. Finally, on this issue, we can usefully look to the Michigan threshold no fault and the Quebec pure no fault experience. The United States Department of Transport study estimates that Michigan returns 55.1¢ of the premium dollar to claimants.[20] The Quebec experience is dealt with by Professors Fluet and Lefebvre in the 1986 study of the Régie. A summary of the study's findings was reproduced as an appendix to the Task Force Report.[21] The Fluet/Lefebvre study concluded that the Régie returned 60% of the premium dollar to claimants in the 1981-1984 period.[22]

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[19] The WCB in Ontario estimates that approximately 15% of revenues are used for the expenses of the system, an improvement from the former estimate of 18%. The WCB acknowledges that even the 15% figure may be open to some question.

[20] U.S. D.O.T., Compensating Auto Accident Victims...Report (1985).

In my opinion, transaction costs (mainly defense legal expense) can be reduced in a pure no fault plan. The reduction will likely be in the area of 5% of earned premium. To that extent, pure no fault can be said to be more efficient than the current third party compensation system. I doubt that there would be any reduction in transaction costs in threshold no fault. There is hence no cost efficiency basis on which to proceed to threshold no fault.

Insurers regard party-and-party costs (that is, costs paid to claimants) as part of claims. I will deal with cost reduction at the claims end later in this chapter. For now, I note that in pure no fault what insurers now pay in party-and-party costs will be dramatically reduced because of the elimination of third party claims. The insurer's exposure to party-and-party costs would not, however, be entirely eliminated. Party-and-party costs will still be paid in some disputed first party claims.

In threshold no fault, the reduction in party-and-party costs paid would be less substantial. The actuarial data accompanying the I.B.C.'s submission, estimate that the threshold proposed by the I.B.C. although eliminating an estimated 92 out of a 100 claimants would leave 60 out of 100 third party compensation dollars in the system. More than 60 out of 100 party-and-party cost dollars would remain in the system in that in respect of claims eliminated by the threshold, many claimants would not have had legal representation in any event. Those remaining in the system will, by definition, be serious cases in which claimants will be represented by lawyers.

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[21] Ontario Task Force on Insurance, A Pre-Publication of the Final Report (1986), Vol. 2, Appendix 13.

[22] C. Fluet and P. Lefebvre, L'Assurance Automobile au Québec: Bilan d'une reforme (1986).

I do not view party-and-party costs, or solicitor and client costs for that matter, to be part of an efficiency analysis that determines what part of the premium dollar is made available to claimants. There is no doubt that when a claimant is represented by a lawyer, claims costs increase in two general respects. First, the insurer will on balance be required to pay more in damages than would be the case were the claimant not represented. Second, the insurer will be required to pay party-and-party costs. These matters were discussed in Chapter 7.

Solicitor and client costs in excess of party-and-party costs, in theory, reduce the plaintiff's compensation. But the claimant is a loser from a financial standpoint only if what the claimant pays exceeds the difference between what the claimant actually received in damages and what the insurer would have paid had the claimant been unrepresented.

Efficiency considerations aside, when a no fault system is being assessed from a comparative cost (and hence premium) standpoint, reductions in compensation paid for economic and non-economic loss, party-and-party costs, defense legal costs, external adjusting costs, internal adjusting costs, the costs of other experts, administrative expenses and other expenses would make resources available for other purposes. One of those other purposes is the payment of additional first party no fault benefits to provide compensation to those not now eligible to receive it. When all is said and done, history suggests that if premiums are not to be increased, the funding for increased first party benefits can only be obtained by systemically reducing or eliminating existing non-economic loss compensation rights.

(d) Incentives/Deterrence

Those who favour the retention of tort law, suggest accidents will increase if the tort system is discarded in any motor vehicle accident compensation plan. Those who propose no fault reject the tort system's capacity to deter or view its deterrence properties as both minimal and replaceable.

The Ontario Task Force on Insurance seems to have rejected the tort system's capacity to deter, or at the very least regarded it as minimal; the Task Force viewed deterrence as something to be better achieved from outside the compensation system. The Task Force Report put its position on deterrence this way:[23]

> ...the tort-insurance system cannot and does not achieve a significant deterrent objective ... Finally, even

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[23] Supra.

> if these inefficiencies and obstacles could be cleared by a Herculean reform of the tort system, the question of deterrence, given the reality of modern insurance, is one that can be answered outside of tort. To the extent that modern insurance coverage means that in most situations deterrence will be achieved or will be achievable through the vehicle of premium variability or "experience rating", this very mechanism exists and can be worked into any first-party no-tort accident compensation plan. That is, deterrence via higher premium pricing or "penalty rating" is a common feature of many existing first-party no-tort schemes and could easily be incorporated and developed as a component of the no-tort scheme that we set out in more detail below.[24] ... the tort-deterrence debate is ultimately irrelevant.[25]

This is not a simple issue. For purposes of considering deterrence as related to the abandonment of the tort system on the introduction of no fault, we are not really looking at tort law's reasonable person (or driver) or at the economist's rational actor. In the motor vehicle context, it is drivers at the margin who must be taken into account. Any reasonable person will be deterred from reckless or inappropriate driving activity by concern about personal safety, the safety of others, criminal sanctions, etc.

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[24] Ontario Task Force on Insurance, Final Report (1986), pp. 64 and 65.

[25] Ontario Task Force on Insurance, Final Report (1986), pp. 64 and 65.

Proponents of tort law's deterrence-related qualities often put their case too broadly and make claims for the tort system that make very little sense. It cannot be that tort law or the tort system exerts any massive deterrence influence. At that level the argument advanced by those who favour tort law on deterrence grounds flounders. Just as a simplistic analysis of deterrence based upon a consideration only of personal safety and perhaps criminal or regulatory sanction is flawed, so too is the argument that we will in short order be overwhelmed with increased accidents were the influence of tort law to be removed.

In dealing with the extent to which tort law can validly claim to meet deterrence objectives, Professor Schwartz stated at a 1984 seminar:

> When the deterrence argument is stated in a strong form, what is seems to claim is that tort liability should succeed in systematically suppressing negligent conduct. Given, however, the various considerations referred to above -- and given also the incidence of negligent conduct observable out there in the real world -- I regard this strong argument as laughably wrong. Yet the important (and often overlooked) point is this: The falsity of the argument in its strong form leaves entirely open the question of the validity of the deterrence argument in a moderate form, a form that merely suggests that tort liability exerts some measurable (and desirable) effect on the level of risky conduct in society.
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> When moderately stated, the deterrence argument may well be sound. Certainly there is some evidence to support the idea that liability rules play some

> role in the control of risky conduct.[26]

As the deterrence debate develops too much is claimed on the one hand and too little considered on the other hand; in result the deterrence issue often receives flimsy and somewhat cosmetic consideration.

As Dr. White has pointed out in his Inquiry research study, deterrence has different meanings.[27] In dealing with what he characterizes as specific deterrence, Dr. White says this:

> Amongst both traffic safety experts and lawyers, there is the not unreasonable belief that the experience of some driving-related misadventure will affect a driver's behaviour, usually for the better. People tend to underestimate risks to themselves and tend to overestimate their driving abilities as compared to other drivers. Accordingly, they are relatively impervious to public educational messages and other inputs which might improve their driving performance. Although the effect occurs unevenly, it has been shown that accidents, injuries or penalized infractions do tend to sensitize drivers somewhat. ... In the case of specific deterrence, our objective should be to seek the maximum behaviour-change impact from each accident experience. This is not as good as preventing the first accident from occurring, but it does involve a

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[26] Professor Schwartz's address to the Seminar Faculty of Law, Australian National University, Canberra, Australia, August 17-19, 1984.

[27] Inquiry Research Study V.

> significant part of the driver population.[28]

General deterrence is another matter. The principle of general deterrence is part of the vocabulary of those involved in the criminal law, particularly at the sentencing level. General deterrence must focus on those who in the criminal parlance are not yet offenders. Dr. White has correctly identified driver behaviour, in all its aspects, as the primary point of concern. He put it this way:

> In broad terms, the 'what' is accident-producing behaviour, and the 'who' is the not yet accident-affected driver public. To understand general deterrence usefully, the genesis of driving behaviours must be traced, which will give some indication of the 'how'. It is worth noting that imbedded in the term 'deterrence' when applied to MVA (sic) production, there is a double negative: we are speaking of preventing a negative behaviour, when we could as easily be speaking of promoting a positive one.

The deterrence argument, as related to motor vehicle accidents, cannot realistically be viewed from a purely economic perspective. Deterrence in economic terms has much more relevance in the field of products liability. Unlike drivers, manufacturers will be aware of risks and may choose to calculate their cost. Decisions may be made for purely economic reasons. A classic example of this is the famous decision of the Ford Motor Company not to relocate the Pinto gas tank, a decision that was made after risk calculation suggested that relocating the gas tank was not cost justified. The problem with the economic or cost benefit approach to negligence and deterrence is that it has no real relevance to driver behaviour.

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[28] Inquiry Research Study V.

If, as I think is the case, deterrence has to be looked at from the perspective of its impact on driver behaviour, some consideration has to be given to an analysis of driver behaviour as related to the question of how accidents happen, and how the number and rate of accidents can be reduced.

Dr. White identifies the individual driver's sense of what his or her driver role is as crucial to driver behaviour. The development of appropriate attitudinal responses is thus essential to driver education and traffic safety campaigns.

If tort law, however mysterious it may be to the public, is viewed as imposing liability in response to fault, it seems reasonable to consider what general impact its elimination may have on the driving public. Dr. White makes two valid points: first, changes in social attitudes may well be late blooming; second, the molding of attitudes and roles is central to driver behaviour. Dr. White puts the latter point this way:

> Prevention will be mostly behavioural, and the key behaviour is that of the driver. There is virtually no disagreement that the most important influences on driver behaviour are socio-culturally determined attitudes and roles.

If, as Dr. White claims, there are deterrence-related advantages to the tort system and tort law, their removal will affect behaviour. There may well be substance in Dr. White's conclusion that the tort system may be more important for what it is than for what it does.[29] Tort law, as related to motor vehicle accidents may have some representational significance in the development of appropriate attitudes and roles.

There is also the issue of what impact the introduction of no fault on its own merits may have on attitudes on behaviour and on accidents. It is on this issue that reference is often made to Professor Gaudry's work. I have considered Professor Gaudry's Report on the Régie together with his research study for this Inquiry. I have also spoken at length to Professor Gaudry about the impact of no fault on Quebec motor vehicle accident rates.

Professor Gaudry's massive study of Quebec accident rates following the introduction of the Régie revealed that after the introduction of no fault, there was an increase in motor vehicle accidents of all types; bodily injury motor vehicle accidents (at least one injury, no deaths) increased by 26.3%; fatal accidents increased by 6.8%, and accidents with property damage increased by 11.0%.

Those who support tort law on deterrence grounds look to this data as a basis for the conclusion that the removal of fault, and the introduction of no fault, will lead to an increase in the instance of accidents at all assessment levels (property damage, bodily injury and fatal accidents). Tempting as this conclusion may be, its validity is called into question by a number of variables referred to in detail in Professor Gaudry's Inquiry research study. Chief among these variables are Quebec's flat premium rating system and compulsory insurance.

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[29] See also E.J. Weinrib, "Toward a Moral Theory of Negligence Law," Law and Phil. 2(1983):37.

In Quebec, all insureds pay the same premium for Régie coverage. No resources at the government insurance level are committed to the determination of fault. Bad risks, which may well have had more accidents and more convictions for driving-related offences, pay the same premium as demonstrably good risks. This results in good risks subsidizing bad risks. Gaudry suggests that flat premium rating led to an increase in the driver population (measured by the issuance of driver permits) and that the driver population increase was weighted in favour of higher risk drivers. Thus, high risk drivers who could not afford to drive and did not drive before Quebec's no fault plan was introduced, became drivers in Quebec's flat premium rating environment. When more high risk drivers are brought into the system, there will be more motor vehicle accidents.

Professor Gaudry has concluded that compulsory insurance may also have had an effect on the rate of motor vehicle accidents in Quebec after no fault was introduced. Although Quebec has had compulsory insurance since 1961, the advent of no fault in 1978 changed administrative procedures so as to require those registering vehicles to pay for Régie coverage at the same time. This put some external teeth in the 1961 compulsory insurance law and resulted in virtually everyone in Quebec being insured. This, Gaudry suggests, worked to reduce levels of care.

The same result was effected as a result of 14 to 18% of uninsured vehicles becoming insured vehicles through the introduction of compulsory vehicle damage coverage. Professor Gaudry's conclusion is that the introduction of no fault in Quebec did have some unquantifiable impact on the Quebec motor vehicle accident rate, but that the no fault impact was small compared to the impact of compulsory insurance and flat premium rating.[30]

I think it should be noted that there may well be a distinction between measuring the impact of no fault schemes on accident rates and assessing the capacity of the tort system to deter unacceptable driving behaviour. In addition to Gaudry's work, there have been several empirical studies which have sought to determine whether the adoption of no fault or modified no fault laws affects accident rates.[31]

In a study of accident rates in 16 American states which adopted threshold no fault laws between 1971 and 1976, Elizabeth Landes concluded that, except for states with very low thresholds, no fault produced a statistically significant increase in fatal accidents and accident costs.[32] Subsequent studies have criticized

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[30] Professor's Gaudry's Inquiry Research Study I.

[31] See C.J. Bruce, "The Deterrent Effects of Automobile Insurance and Tort Law: A Survey of the Empirical Literature," Law and Policy 6, no. 1 (1984):67.

[32] E. Landes, "Insurance, Liability, and Accidents: A Theoretical and Empirical Investigation of The Effect of No-Fault Accidents," J. of L. and Econ. 25 (1982):49.

Landes' methodology and rejected her conclusions.[33] After analyzing data from all 50 states and the District of Columbia in the years 1967 to 1980, Zador and Lund concluded there was no support for the claim that adoption of no fault laws increased the frequency of fatal accidents.[34]

Another study by Kochanowski and Young reached similar conclusions.[35] Using cross-sectional data from each U.S. state for the years 1975, 1976 and 1977, the authors attempted to explain fatal accident rates in each state as a function of the characteristics of the state's licensed drivers, driving environment and whether or not the state had no fault automobile insurance. The authors found that driver characteristics significantly influenced fatality rates. Kochanowski and Young found fatalities were more likely to occur in states with a relatively high percentage of young drivers, in states where the licensed driving population was heavily dominated by male drivers and in states with relatively lower per capita incomes. As to environmental characteristics, other things being equal, the study concluded that fatality rates were lower in more densely populated states. Although the authors stated unequivocally that no fault automobile insurance was not associated with higher fatality rates, their results did not suggest that no fault insurance would lead to a significantly safer driving environment and fewer fatalities.

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[33] See e.g., O'Connell and Levmore, "A Reply to Landes: A Faulty Study of No-Fault's Effect on Fault?" No. L. Rev. 48 (1983):649; Sugarman, "Doing Away With Tort Law," pp. 588-90.

[34] Paul Zador and Adrian Lund, "Re-Analyses of the Effects of No-Fault Auto Insurance on Fatal Crashes," J. of Risk and Ins. (June 1986):226.

[35] Paul Kochanowski and Madelyn Young, "Deterrent Aspects of No Fault Automobile Insurance: Some Empirical Findings," J. of Risk and Ins. (June 1985):269.

The 1985 U.S. Department of Transportation (DOT) Study analyzed both the before and after experience of the 16 states that adopted threshold no fault in the early 1970s compared with the 34 states that retained tort or adopted add on systems; the study concluded that no fault automobile insurance did not have any measurable effect on fatal accident rates.[36]

What reasonable conclusions emerge from all of this evidence? I start that exercise by noting a negative. There seems to me to be no credible evidence to suggest that eliminating tort law and substituting no fault will decrease accident frequency. Equally, looking at the empirical evidence as a whole it is difficult to draw the conclusion that no fault has caused a significant adverse effect on accident rates. Nor does the evidence seem to suggest that tort liability exerts any statistically measurable effect on the level of safe driving.[37] But this does not end the matter. The study done by Professor White and the observations of Professor Schwartz give force to the argument that the tort system still performs some modest deterrent function in the motor vehicle context, even if its impact is not empirically demonstrable.

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[36] U.S. D.O.T., Compensating Auto Accident Victims...Report (1985), pp. 159-165.

[37] See Sugarman, "Doing Away with Tort Law" at p. 587.

Intuitively, I agree with Dr. Wilde's observation that if an event (a motor vehicle accident) is generally to be viewed as being less serious in no fault because no blame in the civil sense is attached to it, there may be more accidents. Professor Wilde put it this way:

> In passing it may be noticed that the subjectively perceived cost of an accident may be different under "fault" versus "no fault" insurance. If no fault insurance is interpreted by drivers as "no blame" or in any other way reduces the expected seriousness of accident consequences, then an increase in the accident rate must be anticipated from a change-over from "fault" to "no fault" insurance. This view is apparently not shared by O'Connell who wrote: "Nor need we fear that an increase in victims' faulty conduct will result form (sic) paying faulty and faultless accident victims alike" (p. 70 in O'Connell, J. "Tort versus no fault: Compensation and injury prevention." Accident Analysis and Prevention 19, (1987), p. 70. However, close reading of this paper reveals that O'Connell himself is not positively confident of that statement and that he favours no fault insurance primarily for reasons other than safety considerations. Moreover, O'Connell's statement appears to be contradicted by the increase in accidents that followed the introduction of no fault insurance for corporal damages (injuries and fatalities) in the Province of Quebec in March 1978, but it should be noted that the new law encompassed other elements as well.[38]

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[38] Gerald Wilde's Inquiry Research Study VI: Incentives for Safe Driving and Insurance Management.

Just as Professor Schwartz suggests that massive claims of deterrence/incentive benefits cannot realistically be made for tort law, massive denunciations of tort law's capacity to deter are not justified. In some cases, driver behaviour may be marginally but positively affected, not by tort law as such, but by what it stands for; moreover, even if the concepts of fault and responsibility exert no positive deterrent influence, the introduction of a no fault compensation plan may well have a modest adverse effect on driver care. This will not occur overnight. It is the "no blame" perception which is important as related to driver behaviour. This perception will not be altered by using an ambiguous titular reference such as "no tort".

Apart from the suicidal, there is no doubt that drivers do not intend or want to be involved in an accident. Some drivers, however, seem to believe that however fast or reckless their driving may be, they will somehow not have an accident. For that group, the prospect of criminal sanctions is too remote. The Highway Traffic Act's penalties are seen as a cost of mobility. For that fringe group, the prospect of formalized responsibility through tort law and the tort system may work in some small but real way to deter the kind of driving behaviour that leads to accidents. At that level, deterrence may be lost by converting from the tort system to a no fault system.

Conclusions on the deterrence issue must remain somewhat uncertain. Nevertheless, if we are rightly concerned about social attitudes and their appropriate development in the context of driver behaviour, then we should be cautious about doing anything which might adversely affect attitudes of basic responsibility. Accountability, however abstract and even mysterious it may be in its manifestation, may well in the longer term support the development of what Dr. White refers to as the "'competent and responsible' driver role".[39] Given the huge social cost of motor vehicle accidents in our society, one must question the appropriateness of abolishing a system which may exercise some effect on accident prevention even if that effect cannot be measured statistically. Moreover, even if the tort system is taken to have no capacity to deter in its own right, it may well be that the introduction of no fault compensation will lead to some, probably slight, reduction in driver care.

(e) Fairness

The tort system/no fault debate often begins and ends with the consideration of compensation and deterrence-related issues. I think, however, that much more than a consideration of those two issues is required.[40] Tort law's capacity for fairness and justice should not in my view be ignored. The public's sense of justice, of what is fair and reasonable, must be taken into account.

The moral values implicit in tort law, seem to me to be both understood and agreed to by a substantial majority of drivers who may not know what tort means, or what tort law is, but who do appreciate what it stands for. As related to motor vehicle accidents, the public understands and accepts the rules of the road. The concept of some individual responsibility for individual actions, at least in a humanely modified form, is central to what reasonable people regard as just.

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[39] Norman White's Inquiry Research Study V: The Function of Deterrence in Motor Vehicle Accident Compensation Schemes, p. 457.

[40] These were the two principal issues considered by the Ontario Task Force on Insurance in its assessment of the tort system's objectives.

In dealing with the issue of fairness, Professor Schwartz commented:

> . . . For the negligence standard lies at the foundation of tort law in Australia, and that standard can be explained in terms of the simple idea that if you "behave improperly and thereby injure another, you are responsible for the consequences". The correctness of this simple idea seems obvious and commonsensical. I should note, however, that the idea's common sense status has recently been disputed by the Oxford Centre which suggests that the idea may be no more than a temporary mood of the particular time and culture. In fact, however, the fairness idea behind the negligence rule can be easily aligned with notions of corrective justice set forth by Aristotle in ancient Greece. (If anything, it is the assumptions on which the Oxford Centre relies in recommending a comprehensive compensation program that are highly vulnerable to the charge of historical and cultural relativism). I should also take care to distinguish the fairness objective I am here describing from what Professor Fleming has referred to as the objective of punishment of the tort feasor. In my description, what is at stake is interpersonal fairness between the defendant and his victim rather than any societal condemnation of the defendant.
>
> . . . The fairness argument stated above has been explained in terms of the improper conduct of the defendant. In the view of many, however, "improper conduct" is a misleading way of characterizing actual negligence. As Keeton O'Connell Report, a motorist is required to render hundreds of observations and judgment calls on an hourly basis; the impression the authors obviously mean to convey is that

> negligence is a random matter, basically excusable on the part of the motorist. In his subsequent writing, Professor O'Connell has extended this point by way of suggesting as a general matter that tort accidents come about in circumstances that are "morally neutral". . . .
>
> The moral neutrality thesis may seem more nearly plausible with respect to highway accidents: as each of us drives by an accident, we may be inclined to say, there but for the grace of God go I. However: if we look at available highway accident statistics, the information we find suggests that negligent motoring need not be sharply divorced from basic notions of wrongdoing.[41]

The moral neutrality of some motor vehicle accidents cannot withstand even anecdotal analysis. Is there anything morally neutral about drinking and driving? Some driving conduct is so manifestly negligent that its relegation to irrelevance would be regarded by many as offensive. This concern, of course, can be alleviated, but not eliminated by increased use of criminal sanctions for inappropriate driving behaviour, and by (the prospect of) increased insurance premiums.

Those in favour of the tort system often cite the example of the drunken driver who crashes into the back of a motionless vehicle with the result that both drivers are seriously injured. The idea that both the innocent and the drunken driver should be compensated equally tends to offend many people's sense of justice.[42] The moral issue raised by this example becomes even more difficult when no fault benefits are increased. Cases of this kind are few in number, but they do serve to emphasize the importance of the idea of fairness in our society's system of values.

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[41] Professor Schwartz's address to the Seminar Faculty of Law, Australian National University, Canberra, Australia, August 17-19, 1984, pp. 71 and 72.

[42] See Dunlop, "No-Fault Automobile Insurance and the Negligence Action," p. 446.

It is the public's sense of fairness which has caused the no fault movement in the United States to stall, if not stop. When the public finds out about no fault's values, or perhaps the elimination of tort law's values as Professor Schwartz says: "It tends not to like it".[43]

Professor O'Connell, an eloquent and convincing proponent of no fault, blames the United States' personal injury bar and the politicians for the pervading legislative inertia in the no fault movement. In the Canadian context, I find Professor O'Connell's explanation unconvincing. If no fault has floundered here, it is not because of a focused opposition by lawyers or others somehow having a vested interest in tort law, but rather because of an unfocused opposition by the public which has been reflected by members of the Legislature of all parties. I do not regard this as something sinister. It is the way our system should work, if in at least some respects, public policy decisions made at the political level are to respond to, rather than establish, public expectations. How else can it be explained that in submissions made to this Inquiry, no major public interest group or political party has proposed a full no fault system of compensation.

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[43] Professor Schwartz's address, p. 74.

Threshold no fault's proponents seem to recognize that the public's expectations and sense of fairness would be offended if the more seriously injured were not permitted to have access to compensation for both economic and non-economic loss, assessed on an individual, case-by-case, basis. Threshold no fault is driven by that social concern and from the insurance industry's standpoint, by a need to limit third party costs, so that increased no fault benefits can be paid to all those injured in motor vehicle accidents.

The 1973 Ontario Law Reform Commission Report, the 1978 Report of the Select Committee on Company Law, and the 1986 Ontario Task Force on Insurance Report all considered the issue of the public's sense of justice and fairness, as related to the elimination of tort law and the introduction of no fault. The 1973 O.L.R.C. Report dealt with the fairness issue this way under the heading of "Public Acceptability":

> ...An analysis of the various studies leads to the conclusion that much of the attitude of the public towards the question of the negligence action versus no fault insurance is based on a misunderstanding of both forms of reparation. It is also reasonable to conclude that given an understanding of what is involved in the two systems the majority of the people would favour no fault. The fact that no fault schemes have been adopted with beneficial consequences in a number of jurisdictions in recent years, and the promotional material on behalf of no fault systems, has begun to issue from the insurance industry itself, tends to increase the reliability of this conclusion.[44]

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[44] O.L.R.C., Report (1973), p. 79.

The 1978 Select Committee on Company Law took into serious account what it viewed as the public's sense of justice and fairness in making its somewhat complex, and I might add, extremely costly recommendation as to an appropriate compensation system.

The Ontario Task Force on Insurance Report, in dealing with the question of public acceptability, stated:

> The Task Force recognizes that these recommendations will raise many questions about design and content. There will also be some opposition and objection in principle. However, most of the objections to no-tort compensation tend to disappear with explanation and education. Many of the questions have already been answered in the literature.
>
> The Task Force has not examined every detail in the design or delivery of a no-tort accident compensation system but it is confident that these details can be worked out through good-faith effort and an open-minded attitude.[45]

I think it more than questionable that given explanation, education, understanding, and endorsement by the insurance industry and a majority of the academic community, the public will regard the total abandonment of fault in the compensation process as fair and just. Perceived fairness and the total abolition of fault are not likely to co-exist in any compensation system even with explanation, education and understanding.

In my opinion, the public's sense of fairness will not be satisfied if fault is left to be dealt with solely through the criminal justice system and the premium rating system. The public's sense of what is right requires that fault be taken into account in the compensation process and, where required, in the criminal or quasi-criminal justice system.

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[45] Ontario Task Force on Insurance, Final Report (1986), p. 69.

Further, the allocation of fault for premium rating purposes is deceptive. In a no fault compensation scheme, fewer resources will be committed to fault. In a no fault environment, fault is less relevant from an insurance standpoint than it is in any system where at least some entitlement to compensation is based on fault. From a premium rating standpoint, good drivers represent a much more significant risk to a no fault system than is the case in a fault-based system. In a no fault system, the insurer has to consider the probability of an insured being in an accident, whether or not that accident will be the insured's fault. In a no fault system, an accident alone triggers the insurer's obligation to pay stipulated benefits; in a fault-based system, not only must there be an accident, the accident must be the insured's fault in order to trigger the insurer's obligation to make third party payments. It follows that as a premium rating factor, fault is of far less significance in no fault than it is in any fault-based system of compensation.

The rather hardy nature of fault was recently considered by Professor Trebilcock who put it much better than I can in saying:

> ...I cannot conceive of an ethically attractive society in which all semblance of individual responsibility for misfortunes inflicted on

> others or oneself (sic) is treated as entirely irrelevant to the compensation equation.[46]

(f) Insurance Compatibility

The insurance industry's position on the no fault issue is separate from the industry's capacity to deliver benefits as required in any recommended compensation scheme. I am satisfied that the industry's flexibility is more than sufficient to deliver benefits and compensation in any reasonable compensation scheme.

E. THE I.B.C. SUBMISSION

I do not intend to canvass the many general submissions made to the Inquiry as to the type of compensation system Ontario should adopt. Two specific proposals do, however, require and deserve comment. They are the I.B.C. threshold no fault proposal and the Ontario Task Force on Insurance Report's recommendation of pure no fault automobile insurance as a first step to a more comprehensive no fault compensation plan.

Before I deal specifically with the I.B.C. threshold no fault proposal and the Ontario Task Force on Insurance's no fault recommendation, I should comment on the policy which underlies the threshold no fault concept. Looked at from the insurer's perspective, the principle underlying threshold no fault is cost-based. To maintain any increase in first party benefits, the insurance industry contends that costs must be reduced on the third party side or premiums will inevitably rise. Those who propose threshold no fault seem to be ever mindful of this need for first/third party cost balance. The threshold has to deny compensation for pain, suffering and loss of enjoyment of life to a sufficient number of claimants to achieve savings sufficient to offset increased costs attributable to the provision of enhanced no fault benefits.

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[46] Trebilcock, Where Does the Buck Stop?, p. 30.

The I.B.C. submission was by far the most comprehensive submission I received on the issue of what compensation system Ontario should adopt. The I.B.C. submission was accompanied by actuarial data containing cost estimates; in that costing, reserves were discounted. Although some of the actuarial assumptions might be questioned, it can be said that the I.B.C. actuarial data and the actuarial data obtained during the course of this Inquiry for the first time make it possible to predict with some reasonable degree of accuracy what effect different compensation proposals will have on loss costs and, hence, on premiums. This is a major advance. Earlier no fault recommendations were conceptual only. The consumer is far less interested in concepts than in premiums. Consumers are entitled to know approximately what any proposed compensation plan will cost.

Some who criticize the tort/insurance system for overcompensating the less seriously injured, support threshold no fault because the threshold will work to keep less serious cases out of the tort system; less serious cases will be denied access to compensation for pain and suffering, even if the injury giving rise to the pain and suffering was caused by the negligence of another. To a certain degree, this rationale was adopted by Professor Brown who assisted the I.B.C. in developing its threshold no fault submission to this Inquiry. At the beginning of Professor Brown's comments in the I.B.C. submission, he states:

> A modified no-fault plan reflects the judgment that relatively minor injuries are adequately compensated by provisions covering economic loss (especially rehabilitation expenses). In such cases, compensation for non-pecuniary loss is not necessary.[47]

It seems to me to be somewhat perverse to purport to resolve an overcompensation problem, at least in the area of non-pecuniary loss, by paying no compensation at all.

After introducing the I.B.C. concept of threshold no fault as indicated above, Professor Brown proceeded to explain the I.B.C. proposal on a pure cost basis:

> In formulating a threshold for non-pecuniary tort claims it is necessary to draw the line between serious and non serious injury in such a way as to achieve sufficient savings to fund the no-fault economic loss benefits (thus keeping the plan "in balance") while being fair to victims.[48]

It is plain that the I.B.C. threshold is designed to keep claimants out of the system for cost reasons, not to let the seriously injured in. In 1978, the Select Committee on Company Law looked at the issue differently, emphasizing public expectations in recommending that the seriously injured be permitted to recover non-pecuniary compensation through tort law.

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[47] Submission of the Insurance Bureau of Canada, Appendix 3, p. 1.

[48] Insurance Bureau of Canada's submission, Appendix 3, p.1.

The I.B.C. threshold no fault submission recommends a substantial increase in first party no fault benefits and a verbal threshold limitation on a claimant's right to recover non-pecuniary damages through tort law. In very broad terms, the increase in costs attributable to paying more no fault benefits to more claimants is, for the most part, absorbed by reducing the number of claimants who would otherwise have a right to recover compensation for pain, suffering and loss of enjoyment of life.[49]

The I.B.C. threshold is generally modelled after the Michigan threshold no fault plan, but the threshold language is even more restrictive than Michigan's in its application.[50] The Michigan threshold excludes those who have not sustained a "serious impairment of body function". The I.B.C. proposed threshold excludes those who have not sustained an injury resulting in a "permanent serious impairment of a body function". The I.B.C. threshold is more restrictive because of the introduction of the word "permanent" and because of the I.B.C's proposal as to how the threshold should be applied in bodily injury cases.[51]

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[49] There may be some reduction in transaction costs but as earlier indicated transaction cost savings in threshold no fault are questionable.

[50] The I.B.C. proposed threshold reads as follows:

> "A person remains subject to tort liability for non-economic loss caused by his or her ownership, maintenance or use of a motor vehicle only if the injured person has suffered death, permanent serious impairment of a body function or serious permanent disfigurement.
>
> (a) Permanent serious impairment of a body function means: An objectively manifested impairment of an important body function which permanently affects the general ability to lead a normal life.
>
> (b) Permanent serious disfigurement means: An injury which impairs the beauty, symmetry or appearance of a person and renders it significantly unsightly, mis-shaped or deformed in some manner."

The Michigan threshold and the I.B.C.'s proposed threshold both permit third party tort claims in fatal accident cases and cases which involve cosmetic injuries (scarring) resulting in serious permanent disfigurement.[52] Most of those injured in motor vehicle accidents are neither killed, nor suffer a serious permanent disfigurement.

In assessing the I.B.C. threshold no fault proposal, it is useful to consider how it would be determined that an injured plaintiff met or passed the threshold in order to claim non-pecuniary general damages. In order to be entitled to non-pecuniary compensation, the plaintiff's injury must:

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[51] The I.B.C. proposal adopts Cassidy standards. See Chapter 11.

[52] The Michigan threshold uses "permanent serious disfigurement". I have assumed the order of the words "permanent" and "serious" is not material.

(a) be objectively manifested;
(b) impair an important body function;
(c) be permanent;
(d) be serious;
(e) permanently affect the plaintiff's general ability to lead a normal life.

The United States Department of Transport has estimated that the Michigan threshold excludes 89% of those injured from access to non-pecuniary general damages. The I.B.C. estimates its threshold would exclude 92% of those injured. If the I.B.C. threshold were applied as suggested in the I.B.C. submission, I think that fewer than 8 out of 100 plaintiffs would pass the I.B.C. threshold. The I.B.C.'s actuary has conceded that the 92% figure is no more than an estimate and may well be too low. If the DOT Report of the Michigan experience is accurate (as most think it is) the I.B.C. has in all likelihood underestimated the percentage of claimants excluded from non-pecuniary compensation.

While the purpose of the exercise is to determine whether a given plaintiff is entitled to non-pecuniary compensation to be assessed by a judge or jury on a purely individual basis, a major ingredient of the I.B.C. threshold determination ignores the plaintiff's individual lifestyle completely. This arises out of the requirement previously referred to that the injury be such as to permanently affect the claimant's general ability to lead a normal life. The question arises: normal for whom? The I.B.C. submission provides a clear answer. It states:

> On the other hand, interference with normal lifestyle is to be determined by an objective

> evaluation of the effects of the injury on the person's body functions and the ability to perform day-to-day activities and not by extrinsic considerations such as the nature of the person's employment. The objective "normal lifestyle" standard has been left undefined. Certain types of employment, athletic and social activities are irrelevant to the standard. (emphasis added)

It is apparent that the I.B.C. views the plaintiff's employment, social activities, etc. as "extrinsic considerations". This troubles me because it requires the trial judge or jury to conjure up a vision of a normal lifestyle (whatever that is). A determination must then be made as to whether the injury has permanently affected the claimant's ability to lead a lifestyle which the claimant may never have led, or for that matter, never wanted to lead, in the first place. At the eligibility level, that approach seems to me to amount to little more than a sophisticated and thinly disguised meat chart imposed for the singular purpose of ensuring that for purely cost reasons, a pre-determined number of injured claimants is excluded from access to non-pecuniary general damages.

There is a further problem with the I.B.C. threshold because of a confusion between injury and disability. The I.B.C. threshold, requires that a claimant's injury be "objectively manifested". The objectively manifested test amounts to an eligibility by x-ray requirement. It is the disability, more than the injury, which is significant. The extent to which a given injury will disable a claimant will depend on a number of factors, including the claimant's vulnerability to injury. Many soft tissue injuries will not pass the "objectively manifested" test. Whether the plaintiff's evidence as to pain and suffering or impairment of body function (i.e., disability) is accepted or rejected, the plaintiff will fail the threshold test if the injury (as distinct from any resultant disability) is not objectively manifested. Because of this somewhat harsh requirement, in Michigan, the courts have accepted thermographic evidence. The legal/scientific legitimacy of the use of thermograms to satisfy the objective manifestation test seems to me to be questionable in the extreme. It is an illustration of what will be done when justice demands it.

As has been pointed out by a number of insurers' representatives, the threshold can be adjusted. Given its cost-based rationale, the extent to which the threshold excludes claimants is, of course, crucial. If the threshold were to be modified, insurers emphasize that more claimants would be permitted to recover non-pecuniary general damages. If that happens, it follows that third party costs would rise and the system may not continue to be in balance, in the sense that increases in first party no fault costs would not be offset by decreases in third party costs.

It seems to me to be inappropriate to deny non-pecuniary general damages to at least 92 out of 100 injured claimants in order to secure a cost reduction which the I.B.C. submission estimates will be about $71 a car. Moreover, as a number of insurers have emphasized, the cost reduction of approximately $71 a car will not result in an equivalent premium reduction because it is premised on premiums being at a reasonable level now. Insurers generally take the position that premiums are now too low.

The I.B.C. proposal is generous in its provision of some no fault benefits. Income replacement benefits are more realistic than is the case now. Rehabilitation is unlimited. A separate long-term care benefit limited to $200,000, is proposed. The long-term care provision excludes compensation for care provided by members of an insured's family, a provision I find unacceptable. In the I.B.C. proposal, long-term care is limited to the lesser of the monthly cost of group residence or the monthly cost of long-term care not exceeding twelve hours per day.

The I.B.C. has proposed non-primary disability benefits to age 65 based upon 90% of net income up to a maximum of $600 a week. The cost of this benefit is modest because it will be paid only after Workers' Compensation, Canada Pension Plan benefits, employers and other group salary-continuation plans, unemployment insurance disability benefits and government assistance programs are first taken into account. By including Workers' Compensation on a list of primary payers, I assume the I.B.C. is prepared to abandon the current Workers' Compensation exclusion contained in Section B of the automobile insurance policy. Individually purchased loss of income protection will be prorated. Students and the seasonally employed are eligible for no fault benefits. I endorse their inclusion in the no fault package.

Homemakers continue to be dealt with separately, and in my view, inappropriately. To be entitled to the $200 a week homemakers' benefit (an increase from $70 a week), the injured homemaker must be totally incapacitated. Why the standard of disability for homemakers should be different from those otherwise employed, escapes me. I do not share the insurers' concern about the potential for fabrication of disability. It seems to me that if homemakers are injured, their disability should be assessed on the same basis as any other person's disability.

The I.B.C.'s proposed death benefit is primary and is based upon the status of the deceased at the time of death. The minimum death benefit is $10,000. I have no serious quarrel with the quantum of the death benefit, although it seems to me that a policy decision should be made as to whether the purpose of the death benefit is to compensate for economic loss or simply to recognize the value of a life in some tangible way. The problem with gearing the death benefit to income, and at the same time ignoring collateral benefits, as the I.B.C. proposes, is that the benefit will tend to compensate those who need compensation least.

The I.B.C. actuarial data, using discounted reserves, indicate that the increased no fault benefit package proposed by the I.B.C. will result in an increased cost per car of $63.22.[53] Because of the threshold exclusion, bodily injury costs will decline by $134.20. This will result in a reduction in loss costs per car of about $71 as previously mentioned. The I.B.C. cost savings estimate is necessarily an approximation. It does not take threshold-related transaction costs into account; further, some of the actuarial assumptions are questionable, in particular the assumed 10% collateral source offset. No reasonable purpose would be served by further examining the I.B.C. cost savings estimate.

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[53] See I.B.C. submission, Appendix 1, Exhibit 1.

The insurance industry's position on compensation-related issues is not hard to understand. From the industry's standpoint, no fault provides an atmosphere of stability and predictability compared to our present system. I am not naive enough to think that the insurers' threshold no fault proposal is the product of their belief in the consuming social benefits of that kind of compensation scheme. If that were the case, one might wonder why the industry had not officially taken a threshold no fault or some other no fault-related position in its submission to the Ontario Task Force on Insurance. The I.B.C. did propose a form of no fault in the 1970s (Variplan). When it was not accepted, the insurance industry took a somewhat neutral position on the no fault issue. Nevertheless, the fact that the insurance industry supports a given compensation plan is important. It provides evidence that benefits as proposed can be delivered, and I would assume in the case of the I.B.C.'s proposal, at least at the cost outlined in the actuarial data provided with the submission.

In supporting the I.B.C.'s threshold no fault plan, spokesmen for the I.B.C. and individual insurers have submitted that in a first party compensation environment, the claimant would be dealing with his own insurer, not the insurer of the at-fault party. Insurers suggest that this should lead to a more amicable relationship between claimant and insurer, and to an emphasis on service, responsive to an awareness that an unhappy customer will change insurers. Insurers contend this will provide an incentive for claims personnel to deal quickly, fairly and efficiently in claims and resolving any disputes that might arise.

This argument has a superficial appeal to it; there is, however, nothing in the history of the delivery of Section B benefits, of compensation under SEF 42 or SEF 44, or compensation under unidentified/uninsured motorist coverage (all provided at the first party level) to suggest that first party claims will be handled with more affection and less delay than is the case now. If there is any pervading shortcoming within the insurance industry at the claims level, it is in the delivery of first party benefits. It is unlikely that upon conversion to some kind of no fault compensation plan, claims-related dealings between insurer and insured will suddenly be dramatically improved.

F. THE ONTARIO TASK FORCE ON INSURANCE REPORT

The Ontario Task Force on Insurance recommended that Ontario adopt a no fault automobile insurance plan as a first step to a more comprehensive accident/disability compensation plan. The Task Force was established as a result of the liability insurance crisis of 1985-1986. In summarizing its preliminary conclusions as to the existing problems, the Task Force Report states:[54]

> First, the heavy concentration of problems in general liability insurance lines is an unusual feature of this cycle. It has been argued here, and will be argued more fully in Part B, that the general liability area has been most severely hit

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[54] Ontario Task Force on Insurance, Final Report (1986), p. 23.

> by the fundamental structural changes in technology, in societal values and in the practice of civil law that we are currently experiencing. It is therefore in this area of insurance that the Task Force has focused much of its attention.
>
> Second, a number of longer-term trends have significantly influenced various aspects of risk and insurance and compensation. Thus, although there is no general crisis of price or availability of personal automobile insurance in Ontario, (emphasis added) there are clear indications of a trend of increase in the real cost of claims for bodily injury, together with indications of a trend towards a more litigious approach to such claims. These trends have little to do with the insurance cycle, but they have become more visible as the trough of the shift to a hard market has approached.

The Task Force's recommendations on automobile insurance are located in Parts B and C of its Report. Part B of the Task Force Report deals with the "Crisis in Liability Insurance"; Part C deals with "Other Insurance Issues", including automobile insurance.

Recommendation B.28 provides:

> B.28 In the short term, a new accident compensation scheme should be implemented by the private insurance industry at least for automobile accident injury. (This proposal is developed in more detail in Part C.)

Recommendations B.29 and B.30 are the Task Force's medium-term and long-term recommendations. Those recommendations are:

> B.29 Ideally and as a medium-term objective, government should begin to work with the private insurance industry to design a universal accident compensation plan that

> would include compensation for all accidental injuries.
>
> B.30 Eventually and in the longer term, federal and provincial governments should begin planning the co-ordination and rationalization of all existing first-party no-tort compensation schemes into a universal disability compensation program.[55]

In that part of the Report dealing specifically with automobile insurance, the Task Force makes a similar, but perhaps less positive no fault automobile accident compensation recommendation. Recommendation C.3 provides:

> C.3 The Government of Ontario should consider elimination of resort to the tort/litigation system with respect to personal injury compensation from automobile accident; or
>
> C.4 The Government of Ontario should consider substantially limiting resort to the tort/litigation system with respect to personal injury compensation from automobile accidents, by way of a threshold.[56]

Having concluded that there was a serious problem in liability insurance and that there was no similar problem in automobile insurance, it becomes somewhat difficult to assess the basis in principle upon which the Task Force proceeded to its no-tort automobile insurance recommendations. The Task Force's approach to automobile insurance has resulted in many suggesting that "if it isn't broke, don't fix it". I have difficulty in wholeheartedly endorsing this caveat because in my view there were and are problems in automobile insurance. Perhaps a better approach might be "if it can be effectively repaired, don't demolish it".

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[55] Ontario Task Force on Insurance, Final Report (1986), p. 69.

[56] Ontario Task Force on Insurance, Final Report (1986), p. 80.

The Task Force's approach to resolution of the liability insurance crisis through the demolition of the tort system generally mirrors that taken in the 1983 Products Liability and Personal Injury Compensation in Canada study done for the Federal Government.[57] The Task Force seems to have concluded that there is a lack of rationality in the manner in which we compensate those injured in accidents. It dismissed the tort system on compensation, deterrence and efficiency grounds; that having been done the Task Force recommended a "no-tort" system of compensation.

As applied to automobile insurance, the rationale underlying the Task Force's no-tort recommendation seems to have been that the perceived need to take the first step (the elimination of tort for compensating those injured in motor vehicle accidents) so as to make it more likely that the Task Force's medium and long-term recommendations might be implemented.

It seems to me that establishing a no fault automobile insurance compensation plan as a first step to a more comprehensive no fault compensation scheme might actually make it less likely, not more likely, that a more comprehensive compensation package could eventually be implemented. Professor Philip Osborne has noted that if no fault is undertaken incrementally, with generous income replacement benefits, it might well be more difficult to proceed to a workable comprehensive compensation scheme because benefits would have to move to the highest existing benefit level.[58]

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[57] E.P. Belobaba, Products Liability and Personal Injury Compensation in Canada: Towards Integration and Rationalization (Ottawa: Consumer and Corp. Affairs Canada, 1983).

The first step no fault automobile insurance approach is dependent on the feasibility of the second step. Ontario is not remotely close to considering, let alone adopting, a comprehensive accident or disability compensation scheme. No fault automobile insurance has to be considered on its own merits.

On a more specific level, the Task Force's efficiency assumptions both as related to the tort system and as to no fault seem to me to be in error. I will not repeat what I said earlier except to note that a no-tort system in which policies are sold on an individual basis, cannot return 80 to 90 cents of the premium dollar to claimants.

The Task Force's alternative threshold no fault recommendation (recommendation C.4) seems to me to have been somewhat cautiously advanced. The Task Force Report says this about threshold no fault:

> Having said this, however, if the decision is nonetheless made to preserve the tort/litigation

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[58] Meeting with Philip Osborne, Winnipeg, Manitoba, April, 1987. The thesis is that no fault benefits in existing compensation plans could not, in practical terms, be lowered as part of a comprehensive accident or disability compensation plan.

> fragment for use in special circumstances, the difficulty remains in designing the appropriate 'threshold'. Should it be a 'monetary' threshold that would permit litigation when actual or anticipated income losses exceed those offered under the basic insurance plan? Or should it be a 'verbal' threshold that would attempt to reserve access to tort for those cases where serious injury has resulted in 'loss of a bodily function or permanent disfigurement'? Both of these approaches present further difficulty. If the threshold is a monetary one geared to excess-income claims, does it make sense to retain the tort vehicle for these situations? The only persons who would resort to lawsuits for these excess economic claims would be those who had chosen not to purchase additional layers of coverage. If this is so, would there not then be cross-subsidization of the higher-income earners? And if a verbal threshold is employed so that non-pecuniary recovery can be obtained for the permanently disabling injury, does it make sense to preserve tort litigation given the 'cap' on pain and suffering, and given that in any event this item of intangible injury could be made a component of the basic first-party no-tort insurance package?[59]

As can be seen from the above, the Task Force's enthusiasm for a threshold no fault scheme was distinctly limited. I share that enthusiasm.

I agree with the Task Force's conclusion that continued use of the tort system on its own cannot be justified on compensation grounds. This, however, does not seem to me to require abandonment of the tort system. Compensation deficiencies of the tort system can be accommodated by a soundly structured no fault benefit package for those injured in motor vehicle accidents. The

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[59] Ontario Task Force on Insurance, Final Report (1986), p. 80.

Task Force did not seem to consider this accommodation as a viable option. I take a somewhat different view from the Task Force on the deterrence issue. Beyond that, there are benefits to the tort system beyond compensation and deterrence which must be taken into account.

G. GENERAL CONCLUSIONS

A motor vehicle accident compensation system should deal humanely with all those who are injured, and provide reasonably generous rehabilitation and long-term care benefits on a no fault basis while at the same time preserving a compensation distinction between those who cause accidents and those who do not.

I reject threshold no fault. Threshold no fault is relatively inefficient and unnecessarily arbitrary. There will either be no, or minimal, savings on transaction costs in threshold no fault. However precise the threshold may be, there will inevitably be disputes about who is out and who is in. I think it is abundantly clear that cost is the singular rationale underlying threshold no fault. That makes a consideration as to who is in and who is out in human terms redundant and irrelevant. To provide reasonable no fault benefits and at the same time to be cost effective, the threshold must deny non-pecuniary compensation to a substantial number of accident victims who would otherwise be entitled to such compensation. That is necessarily arbitrary and in many instances unfair. This threshold exclusion cannot be justified on the basis of excluding small cases from the system. In their application, thresholds, to be cost effective, must exclude many cases that no one could suggest involve minor injuries.

I reject pure no fault on fairness and deterrence grounds and because it is manifest that few seem to want it. From a cost efficiency standpoint, there are clear benefits to pure no fault compensation. Nevertheless, appropriate social policy cannot be judged solely on a cost basis. Inquiry hearings have led me to conclude there is little public demand for pure no fault and that there would be a great deal of public resentment were it to be implemented. I make no apology for considering what I perceive to be the public's response on this issue.

Many of those who favour no fault suggest that the injured should not be compensated for pain, suffering, etc., because people do not typically insure themselves against that loss. I find this argument unconvincing. Insurers do not provide that coverage, and as Professor O'Connell somewhat facetiously noted, if they did, insurers would likely decline to sell first party pain, suffering, etc., coverage to anyone who wanted to buy it (on moral hazard grounds).[60] Moreover, stretching matters somewhat, it might be said that the 95% of Ontario drivers who purchase underinsured coverage (now SEF 44), are in some respects purchasing first party protection for both economic and non-economic (pain, suffering, etc.) loss.

I can see no valid reason why the provision of humane no fault benefits and tort law cannot co-exist. As a matter of general principle if all those injured in motor vehicle accidents are entitled to humanely structured no fault benefits and access to universal social programs, I see little justification for abolishing or restricting recourse to tort law. The preservation of fault-based access to individualized compensation accords with the public's sense of what is right and in a modest way may achieve some deterrence benefits. The criticism of the tort system on compensation grounds is answered by the availability of fair and comprehensive no fault benefits. In the final analysis, the legitimacy of the co-existence of no fault and tort depends upon two considerations. First, there must be a substantial expansion in the quantum of no fault benefits and in the eligibility criteria for these benefits. Second, the compensation plan must be capable of being delivered through the automobile insurance system at a reasonable cost.

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[60] Conference, Toronto, May 15, 1987.

No fault benefits for those injured in motor vehicle accidents, are, in my view essential. If no fault benefits are increased, as I think they must be, first party premiums will have to go up. The increase will be modified by the existing third party offset which I think should continue. No fault benefits paid or available should continue to be deducted from a third party judgment or settlement. The cost savings resulting from the recommendations contained in Chapter 10 will be discussed in more detail later. For now, I note that all of these savings should more than cover any increase in first party costs attendant upon the implementation of the no fault benefits that I propose be made part of the standard form of automobile insurance policy. Although changes in pre-judgment interest, the collateral source rule, etc., are cost justified, they are also justified on compensation principles generally. Finally, cost savings will result from the implementation of the Ontario Court's Inquiry recommendation as to the Provincial Court (Civil Division). I note as well that substantial additional cost savings would result if insurers were to impose a more realistic rough upper limit on party-and-party costs now paid to claimants' counsel. The private sector could benefit from the experience of the public insurers in Manitoba, Saskatchewan and British Columbia in that regard. All three public insurers pay substantially less in party-and-party costs than is the case in Ontario.

H. NO FAULT BENEFITS (ACCIDENT BENEFITS): RECOMMENDATIONS

(a) Eligibility

There should be no conduct-related exclusions to no fault benefit entitlement. The no fault benefit package should be truly no fault. All those injured in motor vehicle accidents (including pedestrians) should be given access to the no fault benefits.

Accordingly, the standard form of automobile insurance policy should be expanded to provide no fault accident benefits without exclusions related to driving conduct.

(b) Rehabilitation/Medical

I endorse the emphasis which has in the recent past been placed on rehabilitation. The I.B.C. proposal and the Ontario Task Force on Insurance Report both recommended a substantial increase to the existing Section B rehabilitation benefit. It seems to me that it would be inappropriate to make the benefit unlimited. Regulatory problems mitigate against that. The rehabilitation benefit should, however, have a generous limit in both quantum and time.

I recommend that the rehabilitation benefit be increased from $25,000 to $500,000 per claim. The time limit should be increased from 4 years to 10 years, or 20 years less the victim's age, whichever is longer. The $500,000 limit will be sufficient for all but the most unusual and catastrophic of cases. The time limitation is designed to provide a minimum period of 10 years access to rehabilitation. The 20 years less the victim's age provision is designed to catch children who are injured and who require rehabilitation over an extended period of time. Head injuries, particularly involving children, often require extended rehabilitation.

Rehabilitation should be expansively yet clearly defined so as to remove doubt as to the first party insurer's obligation to fund physical and vocational rehabilitation. One structurally sound definition of rehabilitation can be found in the United Nations publication World Program of Action Concerning Disabled Persons:

> Rehabilitation means a goal-oriented and time-limited process aimed at enabling an impaired person to reach an optimum mental, physical and/or social functional level, thus providing her or him with the tools to change her or his own life. It can involve measures intended to compensate for loss of function or a functional limitation (for example, by technical aids) and other measures intended to facilitate social adjustment or readjustment... Rehabilitation usually includes the following type of services: (a) early detection, diagnosis and intervention;

> (b) medical care and treatment; (c) social, psychological and other types of counselling and assistance; (d) training in self-care activities, including mobility, communication and daily living skills, with special provisions as needed, e.g. for the hearing impaired, the visually impaired and the mentally retarded; (e) a provision of technical and mobility aids and other devices; (f) specialized education services; (g) vocational rehabilitation services (including vocational guidance) vocational training placement in open or sheltered employment; (h) follow-up... In all rehabilitation efforts, emphasis should be placed on the abilities of the individual, whose integrity and dignity must be respected. The normal development and maturation process of disabled children should be given maximum attention. The capacities of the disabled adults to perform work in other activities should be utilized.[61]

Rehabilitation should be paid for at the first party level, not on an expense incurred only basis, but rather by giving the claimant, the claimant's medical advisors and the claimant's medical rehabilitation counsellors the benefit of the doubt. If the first party insurer requires an independent medical examination, it should, of course, be entitled to one. In the meantime, rehabilitation should be undertaken and paid for, not delayed or denied completely.

Giving the benefit of the doubt to the injured person may be new to automobile insurance. It is not, however, all that unusual. Both the federal Pension Act[62] and the

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[61] United Nations Decade of Disabled Persons, 1983 to 1992: World Program of Action Concerning Disabled Persons, pp. 3 and 5.

[62] R.S.C. 1970, c. P-7 as amended. See section 85.

Ontario Workers' Compensation Act[63] contain benefit of the doubt provisions enuring to the benefit of the injured person. By way of illustration, section 3(4) of the Workers' Compensation Act provides:

> In determining any claim under this Act, the decision shall be made in accordance with the real merits and justice of the case and where it is not practicable to determine an issue because the evidence for or against the issue is approximately equal in weight, the issue shall be resolved in favour of the claimant.

Medical expenses should continue to be in excess to O.H.I.P. For all practical purposes, O.H.I.P. absorbs all medical, hospital-related expenses.

(c) Long-Term Care

Long-term care should be separated from rehabilitation and fixed at $500,000. The family of the injured person should not be excluded from long-term care compensation entitlement. Reasonable family participation in long-term care should not be discouraged, but rather encouraged. The long-term care benefits should be paid to the injured person so as to permit the injured person as much freedom of movement as can be built into the system. Long-term care benefits should be no greater than the monthly cost of group residence which might reasonably accommodate the insured's needs having in mind the nature of the injuries and any other relevant factors.

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[63] R.S.O. 1980, c. 539 as amended by S.O. 1984 c. 58, s. 3.

(d) Disability Benefits

The quantum of the income replacement benefit must be increased to provide economic stability for those injured in motor vehicle accidents. It is, however, inappropriate in my view to establish an inordinately high income replacement benefit. It must be remembered that it is compulsory for Ontario's drivers to buy this coverage. Many drivers will not be able to resort to it. For example, the unemployed (including the retired) will often have no access to the no fault income replacement benefit if injured, yet those persons are compelled to purchase the coverage. Nonetheless, I have concluded that the coverage must continue to be compulsory. It is in the public interest that a safety net be established at the first party level for all Ontario drivers. For those who will not have access to the income replacement benefit, subsidization of others through Section B automobile insurance premiums will be relatively modest. High income earners will as well tend to have limited or no access to the first party benefits because of income continuation plans. They too will be required to modestly subsidize others in the system through their Section B automobile insurance premiums. I see no problem with that.

(i) The Employed

The no fault benefits should include an income replacement benefit based upon 80% of the claimant's gross income up to a maximum of $450 a week. The $450 a week disability benefit is reasonably consistent with the existing Workers' Compensation benefit.[64] It is, in my view, desirable that a special group, those injured in motor vehicle accidents, should not have access to a no fault benefit significantly higher or lower than the benefit available to those injured in the workplace. I recognize that motor vehicle accident victims, unlike those injured in the workplace, have access to the tort system. However, because of the emphasis I place on the no fault package I am of the view that these disability benefits should be similar. Further, if we eventually proceed to a comprehensive accident (or disability) compensation scheme, compensation rights for all those injured (or disabled) will merge. In the meantime, we cannot stand still. Based upon Inquiry Claims Survey data, a disability benefit of $450 per week will result in 95% of wage earners receiving at least 80% of their gross wages from the automobile policy or from employer benefits.

I have opted for a gross, as opposed to a net, income calculation for accident benefits. It is simpler and follows the system we have used since 1969. Overcompensation will be rare using an 80% gross wage calculation. Using a net income base for calculation purposes requires estimating the claimant's tax rate and taking into account the impact of income tax on any taxable collateral source receipts.

Except for U.I.C. benefits, disability benefits should be non-primary. Making disability benefits primary to U.I.C. benefits will add very little to the disability benefit cost and will resolve a major delivery problem. Some insurers are now routinely deducting U.I.C. sickness/accident benefits for disability benefit calculation purposes; other insurers instruct insureds to apply for U.I.C. sickness/accident benefits. This inevitably results in delay and an erosion of the availability of the U.I.C. benefit should the insured become eligible for it. Some insurers arbitrarily calculate the claimant's U.I.C. benefit entitlement and deduct it whether or not the claimant has seen fit to seek the benefit.

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[64] W.C.B. disability benefits are indexed. The current benefit is 90% of net income to a maximum gross income of $35,100 per year.

Disability benefits should not be paid for the first seven days. This will eliminate very short-term injuries from the system. It will also reduce transaction costs for those short-term cases in which transaction costs are now as much as the benefit that is eventually paid. A seven-day deductible will eliminate the incentive to stay off work now built into the system because of the first day payment of benefits and the non-deduction of collateral source payments in the first two weeks following disability. One of the basic problems of the present system is that it de-emphasizes rehabilitation; paying admittedly meager benefits from day one without collateral source offset, emphasizes the benefits of not working. The seven-day deductible policy is consistent with Quebec's no fault plan and the add on plans in all other provinces.

An insured should be entitled to disability benefits beyond age 65. I view this to be an equity rather than a constitutional issue. Because retirement is common at age 65, pension benefits received by the insured at that age (including RRSP, pension receipts) should be offset. I recognize that those injured shortly before retirement age will benefit from this proposal. I am, however, more concerned about those injured at an earlier age who will have had their capacity to develop a worthwhile pension destroyed. For that group, it would be an injustice to terminate disability benefits at age 65.

(ii) The Deemed to be Employed

Some provision has to be made for those who are not employed, but who are denied access to employment because of motor vehicle accident-related injuries. At present an injured insured over 18 and under 65 is entitled to disability benefits if the injured insured has worked six months out of the previous twelve. Any eligibility criterion is bound to be arbitrary. Cost considerations and what seems to me to be the absurdity of providing an income benefit to the chronically unemployed suggest the six month out of twelve provision is reasonable.

While I agree generally with the concept of paying disability benefits to the deemed to be employed, I think certain changes have to be made as to their eligibility for these benefits:

(a) Eligibility should commence at age 16, not age 18. An insured can drive at age 16. I see no basis in principle for discriminating against 16 and 17-year-olds. Moreover, such discrimination may well offend section 15 of the Charter and not be saved by section 1. There is a basis in principle for limiting eligibility at age 65 for those persons not having actual employment, but rather deemed to be employed.[65]

(b) The deemed to be employed benefit should be subject to a 60-day waiting period. It seems to me to make no sense to pay an income replacement benefit to a person who has by definition lost no short-term income. The deemed to be employed are, of course, different from the employed. They have no employment and no contract of employment. It seems to me to make sense to impose a realistic deductible in those circumstances. Scarce resources should be conserved for the more seriously injured. This proposal is consistent with what is soon to take place in Quebec where the Régie benefits are about to be changed in order to impose a six-month waiting period for the unemployed. The Régie legitimately expects to reduce both claims and transaction costs in this way. Ironically, one of the reasons for the recent Quebec cost concern is the proposal to make substantially increased non-pecuniary compensation available (on a no fault basis) to Quebec motor vehicle accident victims.

Once eligible for the disability benefit an insured deemed to be employed should be entitled to the same benefit as the employed. It must be noted that an insured who is unemployed, but who has a contract of employment, should receive disability benefits when exposed to income loss whether or not he has worked six months of the previous twelve.

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[65] See the discussion in Chapter 14.

(iii) Students

Students should be eligible for no fault compensation. The loss of the school year has an obvious economic value. Younger students, if seriously injured, will have lost the capacity to earn income and perhaps even to receive a full education. The 16 to 20-year-old driving group is most vulnerable. Sixteen to 20-year-old males, in particular, have high accident frequency and severity records. A 16-year-old student is by law authorized to drive. Younger students will most likely have a third party action against one or more at-fault drivers through which the student can obtain compensation. There may, of course, be student pedestrians who because of fault have no valid third party claim.

Students should receive no fault compensation as follows:

(a) If an injured student is in elementary school and loses a school year as a result of motor vehicle accident injuries, the student should receive $1,000 for each school year lost.

(b) If the injured student is in secondary school, the student should receive $2,000 for each school year lost.

(c) If the injured student is in college or university, the student should receive $4,000 for each year of eduction lost to a maximum of three years, or if a semester is lost, the appropriate part of $4,000 according to the university's semester system.

(d) Injured elementary and secondary school students should be entitled to $340 per week (approximately 80% of the average industrial wage) at age 19 if disabled and not attending school. An injured college or university student, if disabled, should receive $340 a week when the injured student is no longer entitled to the loss of school year benefits.

(e) Death Benefits

The no fault part of the standard automobile insurance policy should contain a death benefit. The death benefit should not be linked to the deceased's income, but should rather provide some reasonable short-term financial assistance to survivors, responsive to the simple recognition of the value of life. The death benefit should be modest but not insignificant. An inordinately low death benefit will trivialize the value of life; an inordinately high death benefit on the other hand, even if unrelated to income, will provide compensation for those who have little or no need for it (especially if life insurance is not deducted). Moreover, consumers should not be forced to purchase protection which is in the nature of life insurance beyond an amount which gives tangible recognition to the value of life. For those who require the additional protection generally provided by life insurance that protection should be purchased on a voluntary basis through the life insurance markets, or as part of optional coverage under the automobile policy.

Having in mind the above considerations, in my view, the death benefit should be $25,000 for the death of the head of the household or the death of the spouse of the head of the household. An additional $10,000 should be paid for each dependant of the head of the household or spouse. If a dependant child is killed, the death benefit would be $10,000.

(f) Funeral Benefits (Burial)

The funeral benefit is too low and should be increased to $3,000. The cost of this benefit is not significant and will accommodate reasonable funeral and burial expenses.

(g) Home Care and Child Care

Homemakers should be treated more generously and the benefit should be differently structured. I propose to subdivide the benefit to provide separate benefits for housekeeping assistance and child care. Child care will include dependants' care. For anyone who is injured in an automobile accident having responsibility to care for children, urgency in the true sense of that word arises. Child care must, in my view, be taken into separate account in structuring a responsible homemaker's benefit. Children who require the care of a hospitalized mother cannot be expected to wait. Immediate no fault compensation must therefore be made available.

As I stated earlier, the present $70 per week housekeeper benefit, limited as it is to 12 weeks, is too low in all respects and more importantly is conceptually flawed. Further, the same standard of disability should be used as for wage earners, to trigger home care/child care no fault compensation entitlement.

(i) Home Care

This benefit should be $50 per week maximum payable on a reasonable expense-incurred basis. There should be a 7-day waiting period. The standard of disability should be the same as for regular disability benefits. The requirement that a person (usually a woman) who is engaged in home care has to be totally incapacitated before being entitled to this benefit is singularly inappropriate. This benefit is designed to look after household expense: preparation of meals, housekeeping, snow shoveling, grass cutting, etc.

(ii) Child Care

This benefit will acknowledge the need for immediate compensation for those responsible for children (or adults who happen to be legitimately dependant). When a person having responsibility for child care in particular is injured, the system must respond quickly. For this benefit, there should be no waiting period. The child care benefit should be $200 per week. An additional $50 per child or dependant per week should be payable, to a maximum of $350 per week. The benefit should be paid for two weeks without presentation of receipts and thereafter in response to reasonable and proven expenses to the above maximum. There should be no family member exclusion. As in the case of the home care benefit, the standard of disability should be the same as for regular disability benefits.

I. SUMMARY OF RECOMMENDED SYSTEM

Third Party Liability (Bodily Injury and Property Damage)	Minimum Coverage: $200,000
Rehabilitation	$500,000 per claim Time limit: 10 years or 20 years less victim's age, whichever is longer
Long-Term Care	$500,000 per claim Family members included in compensation entitlement. Benefits not to exceed the monthly cost of group residence which might reasonably accommodate victim's needs, having in mind nature of injuries and other relevant factors.
Disability Income Benefits	
1) Employed	80% of gross income, to maximum of $450 per week. Primary to U.I.C. only; non-primary to other benefits. Must be 16 or over. 7-day waiting period.
2) Deemed to be Employed	Must have worked 6 months out of previous 12. 80% of gross income, to maximum of $450 per week. Must be between 18 and 65. 60-day waiting period.
3) Students	Elementary school: $1,000 for loss of year; $340 per week at age 19 if disabled and not attending school Secondary school: $2,000 for loss of year; $340 per week at age 19 if disabled and not attending school College/university: $4,000 for loss of year: $340 per week when no longer entitled to loss of school year benefits

Child Care	$200 per week with additional $50 per week per dependant or child to maximum $350 per week. No waiting period. Payable for 2 weeks without proof of expenses incurred; payable after 2 weeks with proof of reasonable expenses incurred.
Home Care	$50 per week maximum, payable on basis of reasonable expenses incurred
Death	Death any time after accident Head of household or spouse of head of household: $25,000 Each dependant: $10,000 Dependant child: $10,000
Funeral	$3,000

All benefits except the death benefit indexed once a year to annual consumer price index, subject to a maximum of twice the stipulated benefit.

J. COST

I have made it clear throughout that I regard the cost and premium consequences of any proposed compensation plan to be crucial. We have too often embarked upon a search for a compensation utopia without paying any regard to cost. While cost issues may not be determinative, cost is nevertheless important. Consumers are entitled to know what a proposed compensation plan will cost, and what premiums can reasonably be expected if a proposed compensation plan were to be implemented.[66]

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[66] For a full discussion and analysis of the changes in loss costs resulting from my proposed changes in accident benefits and my recommendations on compensation issues (Chapter 10) see Appendix III.

(a) Private Passenger Cars

For private passenger automobiles, in the compensation system I have proposed, the cost breakdown per car and the change up or down from the current system is set out in Table 12.1.

Table 12.1 shows cost changes on a per car basis. This seems to me to be the clearest way to demonstrate cost changes. As can be seen from the Table 12.1, the proposed changes result in a cost reduction of $12.52 per car. In the end result, if my recommendations are accepted, Ontario's motorists will be the beneficiaries of substantially increased no fault benefits at moderately reduced cost and without the collateral sacrifice of any right to individual compensation under tort law. Total cost savings should be approximately $65 million. Premium decreases should at least equal the cost savings.

To the extent that premium reductions result there will be a further cost reduction in that premium tax and commissions, both of which are directly linked to premiums, will be reduced. It should also be noted that the estimated cost reduction will have a ripple effect which has not been taken into account in the calculation set out in Table 12.1. Any change which goes to reduce the quantum of third party claims costs will have an effect on prejudgment interest and party-and-party costs. For example, if the changes to prejudgment interest are implemented, claims costs will go down.[67] When that

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[67] It should also be noted that the cost estimate in Table 12.1 assumes the current statutory prejudgment interest rate, ie. the bank rate plus 1%. If, as I have

TABLE 12.1

PRIVATE PASSENGER CARS LOSS COST

	Current	Proposed	Change[68]
No Fault Benefits			
Rehabilitation/Long-Term Care/Medical	7.72	18.56	10.84
Funeral	0.22	0.88	0.66
Death	1.20	3.47	2.27
Disability - wage earner	13.57	30.94	17.37
- student	nil	2.58	2.58
- homecare	incl	0.16	0.16
- childcare	nil	2.29	2.29
Total No Fault Benefits	22.71	58.88	36.17
Third Party Liability			
Bodily Injury (Claims Only)	198.64	173.67	(24.97)
Bodily Injury Adj. Expense	29.68	29.68	nil
Total 3rd Party Liability	228.32	203.35	(24.97)
Compensation Issues			
Abolishing collateral source rule	na	(6.62)	(6.62)
Prejudgment interest	na	(9.14)	(9.14)
Party-and-party costs re Provincial Court	na	(5.76)	(5.76)
Total Compensation Issues	na	(21.52)	(21.52)
Other			
Property Damage Loss Costs	78.76	78.76	nil
Quebec Part III	0.92	0.46	(0.46)
Uninsured Motorist	8.55	6.81	(1.74)
Total Other	88.23	86.03	(2.20)
TOTAL LOSS COSTS	339.26	326.74	(12.52)

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recommended, the prejudgment interest rate is lowered to the bank rate, further savings will result. Costing of the funeral benefit was based on a benefit of $4,000. I have recommended a $3,000 funeral benefit. The cost difference is insignificant.

[68] The figures in brackets indicate a cost saving.

occurs, party-and-party costs will be reduced. Similarly, if the collateral source rule were abolished, both prejudgment interest and party-and-party costs would be reduced. Gross-up (structured settlements) has not been included in the cost calculation because of an absence of data supporting cost conclusions in that area. If, however, the structured settlement recommendations made in Chapter 10 were to be implemented, further cost reductions would accrue. The cost figures for the proposed compensation plan are estimates which are actuarially sound, but which are still estimates. I am satisfied, nonetheless, that the cost changes closely approximate what might realistically be expected to result should my proposals be adopted. In addition, the suggested changes in legislation dealing with prejudgment interest, gross-up and the collateral source rule if applied generally will result in substantial savings in areas outside of automobile insurance.

As can be seen from Table 12.1, increasing the first party no fault benefits as I have proposed results in a decrease in third party liability costs of $24.97 per car. This, of course, is because of the requirement that first party benefits received be deducted from any third party claim. Increasing first party benefits, therefore, reduces an insurer's third party obligation. As can be seen, the reduction is substantial. Moreover, the no fault benefit plan I have proposed should work to limit the number of cases entering the third party system in the first place in that in smaller cases the increased no fault benefits will make it less likely an injured person will feel required to sue to secure compensation. The right to sue has been preserved. The need to sue has been reduced.

There is a further compensation issue which I have not addressed in the proposals I have made, but which nevertheless should be considered. I refer to the calculation of income loss. The Inquiry Claims Survey indicates that loss of income to settlement or trial accounts for 13 cents out of every claims dollar and that future loss of income accounts for 10 cents out of every claims dollar.[69] The calculation of both past and future loss of income is made on a pre-tax basis, but the lump sum payment received is not taxable because the compensable loss is viewed as a capital loss (loss of capacity to earn income).[70] This capital loss is consistently measured by the claimant's actual pre-tax loss of income. This leads to overcompensation for income loss.

In the first place, particularly for past income losses, it seems to me the capital loss approach is a fiction and should be discarded for the purposes of the direct calculation of loss of income. If the plaintiff has sustained a loss of employment advantage, that is a capital loss and the plaintiff should be compensated for it. Second, even if past loss of income is to be viewed as a capital loss, it seems to me to be inappropriate to measure the loss on a pre-tax basis. The case for treating future income loss as a capital loss is perhaps more plausible. Once again, however, it seems to me a convincing case can be made for valuing that future loss (even if considered as a capital loss) on an after-tax basis. I recognize that if this is done the future income loss must be grossed up. That is exactly what happens in fatal accident cases where a dependant's pecuniary loss is assessed on an after-tax basis. Even if we continue to treat future income loss on a pre-tax basis, there is justification in treating past income loss on an after-tax basis.

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[69] See Figure 7.7.

[70] See The Queen v. Jennings, [1966] S.C.R. 543.

If loss of past income were dealt with on an after-tax basis, Inquiry Claims Survey data suggest cost savings would be about $6 per car. If future income loss were dealt with on an after-tax basis, there would be further cost savings of about $4 per car. In addition, if all income loss were assessed on an after-tax basis, the abolition of the collateral source rule would result in approximately $13 savings per car, that is $7 per car more than reflected in Table 12.1. If all of these adjustments were made there would be additional cost savings of approximately $85 million.

(b) Motorcycles

As was indicated earlier, motorcycles present a cost/premium problem in any enhanced no fault benefit environment. Motorcycles cause relatively little damage. Motorcycle drivers and passengers are, however, relatively unprotected and hence vulnerable to serious injury in the event of an accident. It follows that motorcycles represent an increased first party no fault risk and a decreased third party risk compared to private passenger automobiles and more so trucks.

Table 12.2 sets out the motorcycle costs with and without subrogation. The changes I have proposed result in a cost increase for motorcycles at the first party no fault level of approximately $103 per motorcycle. $75 of this comes from the disability benefits proposed. The cost increase attributable to medical rehabilitation and long-term care is approximately $24. It is noteworthy that the cost increase attributable to home care and child care for motorcycles is modest, being approximately 60 cents. Inquiry Claims Survey data suggest that homemakers and those responsible for child care are not frequently found on motorcycles. In any event, after adjustments have been made on the third party side, without subrogation, motorcycles would be exposed to a premium increase of approximately $85 per motorcycle. With subrogation, the cost/premium increase will be about $31. Because the expanded no fault benefits will provide a relatively severe premium problem for motorcycles, subrogation for motorcycles should be permitted.

(c) Commercial Vehicles (Ordinary Trucks)

In the system I propose, trucks will be exposed to somewhat lower premiums. Because "trucks" encompasses a great variety of vehicles, it is difficult to be precise in estimating specific premium changes.

Table 12.3 sets out commercial vehicle costs in the system I propose. Special risks are not included. The recommended increase in no fault benefits will result in a smaller premium increase for trucks than for private passenger automobiles. The Workers' Compensation system will absorb much of the economic loss caused to truck

TABLE 12.2

MOTORCYCLES LOSS COST

		w/o subrogation		w/subrogation	
	Current	Proposed	Change	Proposed	Change
No Fault Benefits					
Rehabilitation/Long-Term Care/Medical	17.06	40.94	23.88		
Funeral	1.06	4.24	3.18		
Death	2.49	7.20	4.71		
Disability- wage earner	41.89	95.51	53.62		
- student	nil	21.36	21.36		
- homecare	incl.	0.04	0.04		
- childcare	nil	0.57	0.57		
Total no fault benefits	62.50	169.86	107.36	85.34	21.23
Third Party Liability					
Bodily injury (Claims only)	74.40	64.73	(9.67)	93.74	19.34
BI claim adj. expense	11.12	11.12	nil	13.90	2.78
Total 3rd Party Liability	85.52	75.85	(9.67)	107.64	22.12
Compensation Issues					
Abolishing collateral source rule	na	(2.59)	(2.59)	(2.59)	(2.59)
Prejudgment interest	na	(3.42)	(3.42)	(3.42)	(3.42)
Party-and-party costs re: Provincial Court	na	(2.16)	(2.16)	(2.16)	(2.16)
Total Compensation Issues	na	(8.17)	(8.17)	(8.17)	(8.17)
Other					
Property Damage Loss Cost	17.21	17.21	nil	17.21	nil
Quebec Part III	1.61	0.81	(0.80)		
Uninsured Motorist	18.74	14.83	(3.91)	14.83	(3.91)
Total Other	37.56	32.85	(4.71)	32.04	(3.91)
TOTAL LOSS COSTS	185.58	270.39	84.81	216.85	31.27

TABLE 12.3

COMMERCIAL VEHICLES (Ordinary Trucks)

	Current	Proposed	Change
No Fault Benefits			
Rehabilitation/Long-Term Care/Medical	2.87	6.89	4.02
Funeral	0.14	0.56	0.42
Death	0.94	2.72	1.78
Disability - wage earner	6.55	14.93	8.38
- student	nil	1.24	1.24
- homecare	incl.	0.06	0.06
- childcare	nil	0.92	0.92
Total No Fault Benefits	10.50	27.32	16.82
Third Party Liability			
Bodily injury (Claims Only)	213.41	195.15	(18.26)
BI claim adj. expense	31.89	31.89	nil
Total Third Party Liability	245.30	227.04	(18.26)
Compensation Issues			
Abolishing collateral source rule	na	(5.65)	(5.65)
Prejudgment interest	na	(9.82)	(9.82)
Party-and-party costs re: Provincial Court	na	(6.19)	(6.19)
Total Compensation Issue	na	(21.66)	(21.66)
Other			
Property Damage Loss Cost	113.30	113.30	nil
Quebec Part III	0.64	0.32	(0.32)
Uninsured Motorist	2.86	2.39	(0.47)
Total Other	116.80	116.01	(0.94)
TOTAL LOSS COSTS	372.60	348.71	(23.89)

drivers as a result of motor vehicle accidents. In addition, on balance, the occupants of trucks are less likely to be injured than the occupants of private passenger automobiles. Table 12.3 shows savings of about $24 per vehicle.

K. OTHER CONSIDERATIONS

All accident benefits other than the death benefit should be indexed. It is important that some form of indexation be applied. The indexation I suggest to take the reality of inflation into account is the annual consumer price index subject to a maximum of two times the stipulated benefit. For example, this would permit the proposed disability benefit to expand with the consumer price index deemed inflation rate to a maximum of two times the existing benefit or $900. If inflation over a period of time increased the disability benefit to $900, the increase would then stop. The benefit should then be revisited. The indexation process should be applied once a year. As matters now stand, I would suggest July 1 of each year because it accords with the insurers' year for statistical purposes.

There will be some injured claimants who will receive at least 80% of their gross wage loss from collateral sources (employer benefits). Those claimants will not be entitled to disability benefits under this proposal. If the employer benefits are not indexed, as is often the case, inflation will result in an injured claimant with collateral benefits being worse off than an injured claimant without collateral benefits. The injured claimant without collateral benefits will be entitled to receive indexed disability benefits under this proposal. In the circumstances, those claimants placed in a position of relative disadvantage because of the indexation provisions of this proposal should receive an incremental benefit after two years of disability, the purpose of which is to bring claimants who have no access to indexed disability benefits and those who do have that access into a position of equality.

Accident benefits claims forms should be common to all licensed insurers. The forms should be simplified and colour coded so that one form is not confused with another. It is necessary to continue to use three forms: the claimant's form, the employer's form and the medical form.

Those in hospital for more than seven days should be paid the first two weeks of accident benefits entitlement without a medical report, unless there are circumstances which clearly and unequivocally suggest that payment is inappropriate.

Adjusters (both company and independent) should be given a specific disability benefit authority so that injured insureds receive their contractual entitlement quickly. I suggest a $2,000 authority.

I recommend that claimants pay for the cost of obtaining reasonably required disability benefit medical report forms for the first three months of disability and thereafter the cost of these short medical reports should be borne by the insurer. I further recommend that insurers and the medical profession try to reach agreement on an acceptable fair fee for these medical reports. Alternatively, a reasonable fee could be built into the O.H.I.P. schedule and processed as a regular part of the doctor's O.H.I.P. billings. If a new agreement were reached with O.H.I.P. to replace the 1978 Agreement, the very minor cost attendant upon including this tariff item could be taken into account.

Section B forms should be forthwith delivered to the injured insured if the insured is in hospital, and mailed or delivered to the insured if the insured is not in hospital. The onus of delivery of the required forms should be on the insurer. My preference is that hospitals be given a supply of medical forms (and if practicable the other forms as well) so that those forms could be routinely completed at the earliest possible date. Emergency doctors would then be able to complete the medical forms in those cases where hospital treatment is accorded the injured insured but the insured is released.

An attempt should be made to co-ordinate the automobile insurance no fault forms with those of Workers' Compensation, U.I.C., Canada Pension Plan and long-term disability carriers. In a perfect world, all would be using the same forms.

To avoid problems with a physician's authority to complete the medical form, the Insurance Act should be amended to provide the insured's physician (or as I have recommended in Chapter 5, the insured's treating chiropractor) with the required authority to complete the form and remit it to the insured's insurer. Alternatively, the medical form could be so constructed as to contain the required authorization. In that event, the medical form would have to be signed by the insured.

I hope we are not too far from having an insured's disability benefit entitlement (as well as the insured's entitlement to other no fault benefits) paid to the insured automatically by the insurer through computers. The fewer human hands involved in these first party dealings the better. There is, of course, a need to have a direct initial personal contact between the injured insured and a representative of the insurer.

The calculation of the disability benefit should be made available to the insured so that the insured or anyone to whom the insured goes for assistance can determine how the net disability benefit paid to the insured has been established.

Return to work, full or part-time, should be encouraged. An insured should not become disentitled to disability benefits by returning to work. The 30-day return to work provision contained in the automobile policy should be increased to 90 days.

Finally, disability benefits must be paid promptly. Those benefits should be paid within 15 days of the insurer's receipt of the required forms. I will deal later with unfair claims practices. For now, I note that unreasonable delay in the payment of accident benefits should be deemed to be an unfair claims practice.

L. ALTERNATIVE COMPENSATION PROPOSAL

The Order-in-Council establishing this Inquiry requires that I consider the appropriate design of a no fault compensation plan for Ontario. In the plan I have proposed, the right to seek individual compensation has not been eliminated or limited. Although the no fault benefits have been substantially expanded, it might be said that the proposed compensation plan cannot reasonably be characterized as a no fault plan.

As is evident, I have rejected both pure no fault and threshold no fault plans. It can thus be said that I do not regard pure no fault or threshold no fault (in their commonly understood forms) as appropriate. There is, however, a modified threshold no fault plan which I think is worthy of consideration.

The plan I have in mind involves a threshold-based capping of non-pecuniary general damages in less serious cases. In threshold no fault proposals, looked at generally, less serious cases are removed from the system with the result that any person suffering a non-serious injury (depending on the threshold definition) receives no non-pecuniary general damage compensation. For the most part, those proposing threshold no fault have done so on a cost basis. This was discussed earlier in this chapter. As also discussed earlier, one of the serious disadvantages of threshold no fault plans, such as the I.B.C. plan, is that they exclude more than the so-called less serious cases.

On any reasonable cost benefit analysis truly small cases do not fare well in the tort system. A fair threshold should focus on cases that legitimately involve injury and disability of a minor nature. Rather than denying the less seriously injured any compensation for pain, suffering and loss of enjoyment of life, it seems to me to make sense both from the standpoint of general principle and cost, to limit or cap the entitlement to non-pecuniary general damages of the less seriously injured.

My alternative recommendation is that non-pecuniary general damages in less serious cases (as defined by a moderate verbal threshold) should be capped with the result that in those less serious cases which do not meet the defined threshold, non-pecuniary general damages will be limited to a pre-determined maximum. My suggestion is that the maximum be in the area of $3,000. In that way, the threshold will not disqualify those not meeting it from access to non-pecuniary compensation, but will rather impose an upper limit on the amount of that compensation. A claim falling below the threshold which is so modest in its proportion as to not entitle a claimant to $3,000 would, of course, attract an assessment of non-pecuniary general damages of less than $3,000. A claim now worth more than $3,000 for non-economic loss which did not meet the threshold would be capped at $3,000.

The number of claimants that might be affected by this proposal is difficult to determine. A substantial number of claims are now disposed of for less than $3,000 in non-pecuniary compensation. Obviously, those cases would be unaffected by this proposal. The threshold definition would, of course, dictate the extent to which cases above $3,000 would be affected by a low end non-pecuniary general damage cap. If fatal accidents, serious cosmetic injuries and serious internal injuries, fractures of weight-bearing joints and the skull, etc., were left in the system as being demonstrably serious, the threshold I have considered would result in a cost savings of about $24 per car.[71]

This approach is preferable to a blanket deductible that some have suggested would resolve cost/premium problems. In the deductible proposal, all non-pecuniary general damages would be subject to a specific blanket deductible. If, for example, the deductible were $5,000, anyone entitled to non-pecuniary general damages of $5,000 or less would recover nothing. A claimant entitled to $12,000 in non-pecuniary general damages would recover $7,000. It seems to me that cost savings under this proposal might well turn out to be somewhat illusory. General damages would increase because of the existence of the deductible. The deductible would become an inverse target. Further, imposing an arbitrary deductible, if applied to all injured claimants, would act as a tax on the system which would reduce non-economic loss entitlement even for the very seriously injured. If the very seriously injured were somehow to be excluded from the application of the deductible, further transaction costs would be built into the system as a result of having to determine those claimants who were subject to the deductible, and those who were not.

The threshold plan I have considered is subject to many of the same criticisms which I discussed in dealing with threshold no fault generally. In particular, whatever language is used to define the threshold and however carefully it is drafted, transaction costs in applying it will not be insignificant. I recognize that the net cost benefits may well be small. For that reason, this proposal is not one that I endorse as a primary recommendation.

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[71] This estimate was provided by Joe Cheng based upon Inquiry Claims Survey data.

CHAPTER 13

OTHER INSURANCE AND CONSUMER ISSUES

A. CATASTROPHIC CLAIMS FUND

A catastrophic claims fund is a means by which an insurer's first party losses in excess of a stipulated sum are pooled on an industry-wide basis. Such claims funds have been established in Michigan and New Jersey; both states have unlimited medical/rehabilitation first party benefits.

In both Michigan and New Jersey, it is clear that the rationale underlying the creation of a catastrophic claims fund is the perceived need to reduce the potential impact, particularly on small insurers, of an unlimited liability for medical/rehabilitation expenses. The Michigan Catastrophic Claims Fund is operated by the Michigan Catastrophic Claims Association. The Association indemnifies insurers for losses that are expected to exceed $250,000. The Michigan pooling mechanism is funded by a per car assessment.

In my view, there is no need to establish a catastrophic claims fund in Ontario. The no fault benefits proposed in Chapter 12 are all capped, that is to say none are open-ended. Medical expense in Ontario is absorbed by O.H.I.P.; long-term care is capped at $500,000 and represents a loss cost that will tend to be late blooming. Rehabilitation is capped at $500,000; it, however, tends to represent a front-end loaded cost exposure and hence may be a matter of concern for smaller insurers. Nevertheless, in my opinion, if insurers are writing the coverage, they should be able to pay the claims without the crutch of loss pooling. Moreover, insurers needing additional protection can obtain it (at a cost) through reinsurance markets.

If Ontario were to introduce a catastrophic claims fund, the mechanism resorted to should operate through the Facility Association. A separate structure is not required.

B. CONSUMER INFORMATION

It is imperative that consumers have better access to relevant information about premiums, underwriting practices and claims procedures. Consumers should have an outlet for expressing complaints and concerns about these matters, quite apart from mechanisms established for dispute resolution.

Recommendations as to disclosure by brokers and the structure of the automobile insurance policy were made in Chapters 5 and 6 and I will not repeat what I said there except where necessary. As a matter of general principle, however, I note that those purchasing automobile insurance are entitled to know what they are buying and what they are paying for it. This will necessarily require complete disclosure of the premium breakdown including the broker's commission.

Premiums should be publicized and explained.[1] I do not suggest actuarial detail is required; nevertheless, insurance can at least partly be demystified by disclosure. The public is quite capable of understanding basic rating concepts such as territory, vehicle type, use of vehicle, etc.

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[1] See Chapter 16. If premiums are set by the proposed rate regulation legislation, publication of premiums set by the Board should be sufficient.

Consumers should have access to claims information including:

(a) the insured's entitlement to no fault benefits and the quantum of those benefits;
(b) procedures to be followed in asserting third party claims;
(c) the availability of dispute resolution mechanisms;
(d) the availability of social programs which might be of relevance to a person injured in a motor vehicle accident;
(e) the consumer's right to challenge legal fees through the assessment process in those cases where an insured has retained a lawyer;
(f) particulars of any relevant limitation periods.

The provision of information to which consumers are entitled will require more than a hotline at the Ministry of Financial Institutions. It seems to me insurance matters, other than the rate review process, should be run through the office of the Superintendent of Insurance. The Superintendent's office will have to be expanded to accommodate the required dissemination of information. Consumers are entitled to effective advice and clear information. I am not suggesting that medical or legal advice be provided. That is the responsibility of doctors and lawyers. Information should, however, be available to assist consumers in resolving medical and legal problems.

C. CLAIMS AND UNDERWRITING PRACTICES

It has become apparent to me that legislation is required to control what I view to be demonstrably unacceptable claims and underwriting practices. I do not envisage draconian restrictions and standards; nevertheless, some standards are required. Many American states have legislation establishing appropriate claims standards and providing penalties for violations. Minnesota's Unfair Claims Practices Act is a useful model.[2] The Minnesota Act imposes standards for claims handling, settlement offers, claims denial and responses to communications from the Office of the Commissioner of Insurance.

Some of the claims standards which should be the subject of regulation are:

(a) an injured insured should be provided with all required no fault documentation within 7 days of the accident; as stated in Chapter 12, all insurers should use the same no fault claims forms;

(b) no fault benefits should be paid within 15 days of the insurer's receipt of required documentation;

(c) no fault claims forms should include instructions as to processing the claim and the telephone number of a named insurance company representative who can assist the insured in processing the claim for first party benefits;

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[2] Minnesota Statutes, 1982.

(d) if an insurer is reasonably required to continue investigating a claim beyond the 15-day period referred to above, where practicable the insurer should notify its insured of that fact and provide information as to the expected date when the investigation will be completed. When the investigation involves suspected fraud on the part of the insured, the insurer should not be required to disclose particulars of the investigation, except upon request to the office of the Superintendent of Insurance;

(e) if a claim is denied on the basis of a specific policy provision, condition or exclusion, the insurer should be required to give specific information as to the provision, condition or exclusion being relied upon;

(f) payment of any first party benefit should be accompanied by an explanation of what the payment is for. In the case of first party claims, the calculation of any disability benefit entitlement should be made available to the insured so that the insured will know how the disability benefit was determined;

(g) no insurer should be permitted to refuse to pay all or part of any first or third party claim where there is no reasonable good faith dispute as to the insured's or the claimant's entitlement;

(h) no insurer should require an insured or a claimant to sign a release extending beyond the subject matter giving rise to the claim payment;

(i) if a first party claim is denied on the basis of a medical opinion secured by the insurer, the insured should be given a copy of the medical report. Insurers should be prohibited from denying first party claims based on verbal medical reports;

(j) an insurer requiring a medical examination of an insured should be required to continue first party benefit payments pending the completion of the medical examination and the insurer's receipt of a medical report. The fact that any benefit has been paid by an insurer in those circumstances should not be taken as evidence against the insurer's position in the event of a dispute;

(k) it is important that the insurer's first party rehabilitation obligation not be ignored, as has too often happened in the past. Insurers should be obliged to fund reasonable rehabilitation if there is credible medical evidence, and in appropriate circumstances the evidence of a rehabilitation consultant, supporting the proposed rehabilitation. The insurer's obligation should crystalize then, not when the expense has been incurred. If an insurer wishes to resist a rehabilitation expense, it should clearly state the reasons for its position and if a medical opinion is being relied upon in support of the insurer's position, a copy of that report should be delivered promptly to the insured or the insured's solicitor. If an insured refuses to undertake or continue rehabilitation that has been recommended by his own medical advisor or the insurer's medical advisor, the insurer's obligation to pay disability benefits should continue until the issue has been dealt with through the dispute resolution mechanism I propose;

(l) under the Minnesota Act, the Commissioner may "...adopt rules to ensure the prompt, fair and honest processing of claims and complaints." The Superintendent of Insurance should be given similar powers;

(m) insurers should face the prospect of reasonable financial penalties for unacceptable claims and underwriting practices. I would suggest $10,000 as the maximum penalty. The quantum of the penalty must be sufficient to impose a realistic sanction, but not so high as to make it unlikely the penalty would be resorted to. Hearings dealing with any alleged unfair claims or underwriting practice should be conducted by the Superintendent of Insurance or the Superintendent's nominee. The hearings should be relatively informal and subject to appeal only by way of judicial review;

(n) quite apart from penalties which may be imposed for an unfair claims practice, an insured who has received delayed or no payment of a first party benefit entitlement should be entitled to interest at twice the prime rate.

Underwriting abuses are more difficult to deal with in a definitive way, because of the variety of underwriting policies used by insurers. Submissions to this Inquiry have disclosed such a varied list of underwriting complaints that it is impossible to effectively catalogue them all. Some have been referred to in previous chapters. At a general level, insurers should not be able to penalize insureds on the basis of intuition. There must be statistical or other evidence to justify underwriting decisions. The Superintendent of Insurance should have jurisdiction to respond to proved underwriting abuses and to impose appropriate penalties.

D. DISPUTE RESOLUTION

It is generally agreed that a better method of resolving first party disputes has to be found. In its Inquiry submission, the I.B.C. proposed a two-tiered dispute resolution mechanism.[3] At the first level, upon a denial of entitlement to any first party no fault benefit, an insured wishing to appeal or seek review must submit reasons for the insured's appeal to an I.B.C. review committee. The review committee would then attempt "...to resolve the difference of opinion with the ombudsman for the insurer". This set-up requires each insurer to appoint a senior claims representative to act as a no fault benefit ombudsman. The insurer's representative would be required to "...pre-authorize all denials or discontinuance of payments..." and as well the insurer's no fault benefit representative would be the contact person for review or appeal purposes. Any decision of the review committee would be binding only on the insurer. If any insured were dissatisfied with the insurer's review committee decision, the insured would be entitled to proceed to arbitration or sue.

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[3] I.B.C. Submission, p. 17.

The C.B.A.O. has attacked the I.B.C. dispute resolution proposal as potentially unfair and arbitrary. The C.B.A.O.'s main concern is the built-in conflict of interest, real or perceived, arising from the obligation placed by the I.B.C. on any insured to appeal to the insurance industry, a corporate part of which has denied the insured no fault benefits in the first place.

The main advantage of the I.B.C. proposal for review by an industry review committee is that the process should be both quick and cheap. It seems to me that if the insured is dissatisfied with the results, little will have been lost. I concede that there is validity to the perceived conflict of interest argument; however, the process is somewhat preliminary and may well work to eliminate some more obvious cases from the system quickly and inexpensively.

I question whether the insurer's no fault benefit representative (I have avoided use of the word "ombudsman") can be expected in practice to preauthorize all denials of no fault benefits. That seems to me in any event to be secondary to the requirement that every insurer designate one person as being responsible for review of no fault benefit payment decisions.

In the circumstances, as a first step to resolving disputes about accident benefits, I recommend acceptance of the I.B.C.'s review committee proposal. At that level, it is not necessary to deal with matters of onus; in the vast majority of cases, I would expect that review committee decisions could be made without requiring the insured's attendance. If that cannot be accomplished, the review committee could go to the insured, not the insured to the review committee. I have in mind cases where an out of Toronto insured is involved in a no fault benefit dispute with an in-Toronto insurer. It must be emphasized that the review committee decision will be binding on the insurer. Otherwise, the system will not work. That is consistent with the I.B.C.'s dispute resolution mechanism submission.

I now move to consider what will happen if an insured having lost before the review committee wishes to proceed further. In my view, an insured should have access to arbitration or the courts by way of a de novo hearing. The decision of the review committee and its reasons should not be given any weight by the arbitrator or by the court.

The Ontario Task Force on Insurance endorsed arbitration along the lines set out in sections 125 and 207(8) of the Insurance Act. The Task Force saw no need for a publicly funded administrative tribunal to deal with first party automobile insurance policy disputes. I agree with that assessment. It seems to me that the Bar and the insurance industry, after joint consultation, should establish a regionalized roster of acceptable arbitrators. Half would come from the Bar and half from the insurance industry, including independent adjusters. The set-up should be regionalized. If acceptable to the insured and the insurer, one arbitrator could be used. Otherwise, each party could select an arbitrator from the established roster and the two selected could select the third. Decisions of the board of arbitration would be binding.

Alternative access to arbitration could be provided within the court structure. Serious consideration ought to be given to establishing an arbitration division within the court system. Judges involved should have some specific interest and expertise. This would permit binding, fast track consensual arbitration for disputes where the parties seek this relatively inexpensive resolution. This might be particularly useful in resolving first party automobile insurance disputes; however, I can see no reason to restrict this concept to automobile insurance-related problems.

Disputes as to available no fault benefits should not delay third party tort system litigation. The third party insurer should be entitled to take appropriate action to force the third party insurer to pay no fault benefits in appropriate cases. Where possible, the third party action should proceed without being delayed by the difference of opinion between the first party and third party insurers. In cases involving no fault benefits to be paid after trial or settlement, no fault benefits received by the claimants should be held in trust for the third party insurer as set out in Cox v. Carter[4] or the claimant could be required to assign no fault benefit rights to the third party insurer.

E. UNINSURED DRIVERS

There is no evidence to suggest that there has been any substantial increase in the number of uninsured drivers. That, however, does not mean there is no problem. Those who choose to drive without insurance force other motorists, who have secured insurance required by law, to pay additional premiums. The fine for driving without insurance coverage should be increased. Anyone convicted of driving without insurance should be exposed to an automatic licence suspension in addition to a fine. Driving privileges should not be restored until the offender has filed proof of financial responsibility. In practical terms that will simply require the offender to obtain insurance. Affordability is not a realistic mitigating factor. If a person's driving record is so bad as to make insurance unduly expensive, that person should not drive.

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[4] (1976) 13 O.R. (2d) 717 (Ont. H.C.).

F. INFORMATION SYSTEMS

Many of the problems in the marketing of automobile insurance are a direct result of a somewhat primitive information system. The inability of brokers to verify information quickly and efficiently leads to increased policy costs and, in turn, to higher premiums. It is known within the insurance industry that new business loss ratios are higher than loss ratios for existing business. One of the reasons for this is the insurer's inability to quickly and accurately obtain and verify information about an applicant for insurance which would be of significance for premium rating purposes. Sometimes this information is never disclosed. On other occasions, the insurer will be made aware of relevant information when it is too late, that is, after an at-fault accident has occurred. On still other occasions, an applicant for insurance will, for example, assert a five-year claims-free driving record and be quoted the appropriate premium. The insurer may then determine that the insured has had two motor vehicle accidents in the last five years. This will result in the policy being terminated or the insurer submitting an amended premium notice. The insured may or may not respond by paying the additional premium. In any event, the transaction costs directly related to issuing this policy will be substantially increased.

What is required is a standardized data base which provides insurers with an applicant's name, address, claims history, etc. This sounds relatively simple, but it is something the insurance industry in Ontario does not have now. Any workable data base will require 100% cooperation in the sense of a complete exchange of information by the insurance industry. That cooperation does not now exist. Because complete cooperation within the insurance industry cannot be guaranteed, it seems to me that legislation will be required.

Furthermore, insurers must have quick, efficient access to an applicant's driving record. This will allow convictions to be used as a rating factor. This is both ethically and actuarially sound. Conviction data are available now; there are, however, two problems. Search costs are too high at $5.00 a search and the information is not available quickly as the search now must be done manually. Driver record information including conviction records should be on-line and available to all insurers. In Alberta, brokers have government computer terminals which provide Alberta insurers with immediate access to driving records. It seems to me all licensed insurers should pay a yearly fee, based on market share, to obtain this on-line computer linkup. This would permit the provincial government to provide driver records to insurers on a break-even basis. It should be noted it is consumers who tend to be the losers because of the absence of a workable industry data base.

Confidentiality of data relating to driver records has been raised as an issue by some in two respects. First, it is suggested the person's driving record is a private matter and hence not something to be subject to the insurance industry's scrutiny. Second, in Ontario, there seems to be a confidentiality concern about young offender conviction records. This latter concern is relevant to 16 and 17-year-old principal or occasional drivers. I reject both concerns. Insurers should be entitled to verify an applicant's claims and driving record. In particular, there is nothing confidential about a Highway Traffic Act or Criminal Code conviction. They are public matters. The young offender's driving record should not be confidential, as long as 16 and 17-year-olds are entitled to drive. Only Ontario has expressed a concern in this regard.

There is a further benefit to the full disclosure of driver records and claims information. If Ontario drivers knew their driving and claims records would be consistently available to all Ontario insurers and that convictions and at-fault accidents would affect premiums, there would be a positive effect on driving behaviour. If deterrence benefits are to be achieved through the potential of insurance premium increases, driver records must be available to all insurers and the public must be made aware that driving-related convictions will lead to increased premiums.

The remaining problem concerns uninsured drivers. Currently, when the vehicle owner wishes to register a vehicle with the province, the owner must supply evidence that the provisions of the Compulsory Automobile Insurance Act have been complied with. The Ministry of Transportation and Communications, (the Ministry responsible for vehicle registration) does not consider it to be its responsibility to verify the existence of insurance coverage. I have been told by those involved with licensing vehicles that as long as the vehicle owner indicates the name of an insurer, however fictitious it may be, vehicle registration is completed. When the Ministry attempts to check whether an automobile insurance policy is in force, the process takes approximately three weeks. This system, or lack of it, substantially reduces the prospect of any real enforcement of compulsory insurance laws in Ontario. The solution lies in a better information system. This can be achieved by more efficient access to existing information. It is to be emphasized that the issue is access to existing information, not the development of new information. Cooperation is essential to the exercise. The cost involved should not be significant.

In the circumstances, I have these recommendations:

(1) that the Ministry of Transportation and Communications act immediately to transfer driver records to computer and that the information be available on-line to all licensed Ontario automobile insurers for a yearly fee based on market share;

(2) that a cooperative information network be established between the Registrar of Motor Vehicles and licensed Ontario automobile insurers to permit the immediate verification of

automobile insurance coverage. Further, it should be a Ministry responsibility to ensure that any person registering a motor vehicle has the required insurance coverage;

(3) that all licensed Ontario automobile insurers be required to be part of an information system. Thus, all insurers should be required to submit claims histories of their insureds to the data base; all insurers would have access to that information.

CHAPTER 14

CONSTITUTIONAL CONSIDERATIONS

Some of the issues I have been asked to consider raise questions as to their constitutionality and, in particular, as to the likelihood of any infringement of the Canadian Charter of Rights and Freedoms (the Charter). Since one criterion of any recommended system is that it be lawful, I felt it important to address these constitutional issues. In doing so, I have had the benefit of the opinion of Peter Hogg, Professor of Law at Osgoode Hall Law School.[1] In what follows, I make extensive reference to Professor Hogg's views with which I am in general agreement.

In my opinion, three subjects warrant constitutional consideration. They are:

(1) the constitutional authority of a provincial legislature to enact a no fault or threshold system of compensation for injuries arising out of motor vehicle accidents;

(2) the constitutionality of age-based entitlement to no fault benefits and the benefits for non-income earners under the standard automobile insurance policy; and

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[1] Professor Hogg's opinion for the Inquiry is found at Inquiry Research Study III. His opinion for the I.B.C. on "Age, sex and marital status" rating classifications is found at Appendix XII.

(3) the constitutionality of using "age, sex and marital status" as premium rating factors.

A. THE CONSTITUTIONALITY OF NO FAULT AND THRESHOLD SCHEMES

For the purpose of considering the constitutionality of no fault and threshold plans, I am prepared to assume that:

(i) a no fault regime provides less benefits than common law damages; and

(ii) no fault will deprive some or all victims of a tort action in the courts.

The constitutional attack made on compensation schemes which limit or take away the right to sue is that they violate sections 7 and 15 of the Charter. Both Professor Hogg and Neil Finkelstein who delivered an opinion on behalf of the I.B.C.,[2] concluded that a no fault or threshold no fault plan would not infringe either section 7 or section 15, but even if it did, such a plan would be justified under section 1 of the Charter. An opinion submitted on behalf of the C.B.A.O.[3] concluded the opposite--that denying or restricting access to the courts infringed both sections 7 and 15 of the Charter and could not be justified under section 1. I am generally in agreement with the conclusions and analysis of Professor Hogg and Mr. Finkelstein. It follows that I do not agree with the C.B.A.O. opinion.

Before addressing the Charter issues, I deal briefly with two other constitutional issues.

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[2] See I.B.C. submission, Appendix 4.

[3] The C.B.A.O. opinion is not attributed to any author.

(a) The Distribution of Powers Issue

Under the distribution of legislative power in sections 91 and 92 of the Constitution Act, 1867, it is clear that the province, by virtue of section 92(13), has legislative authority to create, modify or abrogate causes of action in tort.[4] Equally, a province has legislative authority in relation to automobile insurance and the authority to enact a no fault regime.[5]

(b) The Section 96 Issue

The administration of a no fault motor vehicle accident plan by an administrative agency rather than the courts does not offend section 96 of the Constitution Act. Workers' compensation boards have survived section 96 challenges[6] as has the Quebec Régie.[7]

(c) Section 7 of the Charter

Section 7 provides as follows:

> 7. Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.

There is some dispute as to whether section 7 contains a separate right to "life, liberty and security of the person" or whether this right may be diminished in accordance with the principles of fundamental justice. Most of the case law supports the latter view, so that there is no infringement of section 7, absent a deprivation of fundamental justice.[8] Accordingly, the first question to be considered under section 7 is whether the right to "liberty" or "security of the person" includes a right to sue in tort. If it does, then the second question is whether the right to sue has been taken away in violation of the principles of fundamental justice. Only if both questions are answered in the affirmative is there a breach of section 7.

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[4] MacDonald v. Vapour Canada, [1977] 2 S.C.R. 174.

[5] Canadian Indemnity Co. v. A.G. B.C., [1977] 2 S.C.R. 504.

[6] See, for example, Farrell v. Workmens' Compensation Board, [1961] 2 S.C.R. 48.

[7] Tardif v. Berube (1986), 34 D.L.R (4th) 24.

As both Professor Hogg and Mr. Finkelstein observe, there is not as yet a settled definition as to the content of the opening words of section 7.[9] The Ontario Court of Appeal in R. v. Morgentaler, Smoling and Scott[10] said as follows:

> Some rights have their basis in common law or statute law. Some are so deeply rooted in our traditions and way of life as to be fundamental and could be classified as part of life, liberty and security of the person. The right to choose one's partner in marriage, and the decision whether or not to have children, would fall in this category, as would the right to physical

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[8] See, for example, Singh v. Minister of Employment and Immigration, [1985] 1 S.C.R. 177 at 212 (Wilson, J. for three of six judges). R. v. Morgentaler, Smoling and Scott (1985), 52 O.R. (2d) 353.

[9] At the broad end of the spectrum, Madam Justice Wilson in Operation Dismantle v. The Queen, [1985] 1 S.C.R. 441, spoke of freedom from governmental constraint. At the other end of the spectrum, the Ontario Court of Appeal in R. v. Videoflicks Ltd. (1984), 48 O.R. (2d) 395, took the view that section 7 applies only in respect of a person's physical or mental well-being.

[10] (1985), 52 O.R. (2d) 353.

> control of one's person, such as the right to clothe oneself, take medical advice and decide whether or not to act on this advice.[11]

I agree with Professor Hogg when he says:

> It seems to me to be unlikely that the Supreme Court of Canada would decide that a cause of action in tort which has not yet accrued is within the words liberty or security of the person. That amounts to saying that everyone has a legitimate and constitutionally protected expectation that the common law will not be changed to his or her detriment in the future.

Even if liberty or security of the person in section 7 does include the right to sue in tort, a breach of section 7 will only occur if the right has been taken away in violation of the principles of fundamental justice. The principal case on the meaning of "fundamental justice" is the Supreme Court of Canada's decision in Reference re Section 94(2) of the Motor Vehicle Act (British Columbia).[12] Mr. Justice Lamer for the majority stated:

> Thus, ss. 8 to 14 provide an invaluable key to the meaning of 'principles of fundamental justice'. Many have been developed over time as presumptions of the common law, others have found expression in the international conventions on human rights. All have been recognized as essential elements of a system for the administration of justice which is founded upon a belief in 'the dignity and worth of the human person' (preamble to the Canadian Bill of Rights, R.S.C. 1970, App. II) and on 'the rule of law' (preamble to the Canadian Charter of Rights and Freedoms).

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[11] R v. Morgentaler, (1985), 52 O.R. (2d) 377.

[12] [1985] 2 S.C.R. 486.

> It is this common thread which, in my view, must guide us in determining the scope and content of 'principles of fundamental justice'. In other words, the principles of fundamental justice are to be found in the basic tenets of our legal system. They do not lie in the realm of general public policy but in the inherent domain of the judiciary as guardian of the justice system. Such an approach to the interpretation of 'principles of fundamental justice' is consistent with the wording structure of s. 7, the context of the section, i.e., ss. 8 to 14, and the character and larger objects of the Charter itself. It provides meaningful content for the s. 7 guarantee all the while avoiding adjudication of policy matters.[13]

None of the guarantees in sections 8 to 14 of the Charter which are said to be an "invaluable key" to the interpretation of section 7 suggest that access to the court for a civil wrong is a basic tenet of our legal system. Workers' compensation schemes have existed in Ontario and elsewhere for well over half a century. Furthermore, sections 8 to 14 of the Charter do not suggest that civil liability must always be premised on fault. As Hogg points out, the common law imposes liability on a basis other than fault in a number of situations (vicarious liability of the master for the torts of his servant, the doctrine in Rylands v. Fletcher, etc.). More generally, to paraphrase the language of Mr. Justice Lamer, whether compensation for motor vehicle accident victims should be through the civil courts on a fault basis or through an administrative agency on a no fault basis is "in the realm of general public policy", not in the "inherent domain of the judiciary as guardian of the justice system".

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[13] R v. Morgentaler (1985), 52 O.R. (2d) 503.

In R. v. Morgentaler, et al., the Ontario Court of Appeal also said:

> After considering the above decisions we have concluded that in applying the principles of fundamental justice the Court is not limited to procedural review but may also review the substance of legislation. While the limits of such review will evolve as the interpretation of the Charter unfolds, it is sufficient to say at this juncture that such substantive review should take only in exceptional cases where there has been a marked departure from the norm of civil or criminal liability resulting in the infringement of liberty or in some other injustice. We reiterate that the policy and wisdom of legislation should remain first and foremost a matter for Parliament and the Legislatures.[14]

As Finkelstein notes, it has long been a principle of Anglo-Canadian law that the provincial legislatures may create or abolish causes of action in the public interest. There is nothing to suggest that taking away the right to sue for damages arising from motor vehicle accidents and replacing it with a no fault compensation scheme is an exceptional case or a "marked departure from the norm". In my opinion, replacing a tort action with a no fault plan does not violate any principles of fundamental justice.

In Public Trustee (Alberta) v. Workers' Compensation Board,[15] Mr. Justice Bracco of the Alberta Court of Queen's Bench held that the provision of the Alberta Workers' Compensation Act that prevents an injured worker from suing a third party employer is contrary to sections 7 and 15 of the Charter. This case was decided after I received Professor Hogg's opinion. Professor Hogg, however, was good enough to address the case in a short addendum with which I agree entirely. Mr. Justice Bracco seems to find in the principles of fundamental justice a principle of "fair exchange". He suggests that a worker gets nothing in return for the denial of a tort action against the third party employer. I concur with Professor Hogg[16] who concluded that since the denial of a right to sue in tort is not a breach of section 7 , the question whether a victim gets anything in return is irrelevant. In my opinion, there is no fair exchange principle within section 7. But even if there were, it cannot be argued that in the workers' compensation context employees get nothing in return for giving up the right to sue; so too in the motor vehicle context. Some victims who would get nothing in the tort system would be compensated under no fault. Others who would be compensated in tort may prefer the advantages of no fault. Ultimately, it is a question of values and policy as to which system is preferable. This is preeminently a matter for the Legislature and not for the courts.

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[14] (1985), 52 O.R. (2d) 385.

[15] Released August 13, 1987, as yet unreported.

As both Professor Hogg and Finkelstein correctly point out, their conclusions are strongly supported by American case law.[17] The due process clause in the 14th

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[16] This decision was released after Professor Hogg delivered his opinion to the Inquiry. He wrote a short addendum to his opinion dealing specifically with Mr. Justice Bracco's reasons. See Inquiry Research Study III.

[17] The C.B.A.O. opinion makes no reference to United States case law.

Amendment to the United States Constitution is the functional equivalent of section 7 of the Charter. The United States Supreme Court has consistently held that it is not a denial of due process to replace a tort action with a no fault regime. In New York Central Railroad Co. v. White,[18] the Court upheld a New York workers' compensation law stating in part, "No person has a vested interest in any rule of law entitling him to insist that it shall remain unchanged for his benefit". In the more recent case of Duke Power Co. v. Carolina Environmental Study Group,[19] the Court dealt with a Congressional statute which abolished tort actions in the event of a nuclear disaster and substituted limited no fault benefits. Chief Justice Burger for the Court held this did not breach the Constitution. In his reasons he said the following:

> Initially, it is not clear at all that the Due Process Clause in fact requires that a legislatively enacted compensation scheme either duplicate the recovery at common law or provide a reasonable substitute remedy. However, we need not resolve this question here since the Price-Anderson Act does, in our view, provide a reasonably just substitute for the common law or state tort law remedies it replaces...
>
> The legislative history of the liability-limitation provisions and the accompanying compensation mechanism reflects Congress' determination that reliance on state tort law remedies and state-court procedures was an unsatisfactory approach to assuring public compensation for nuclear accidents, while at the same time providing the necessary incentives for

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[18] (1917), 243 U.S. 188.

[19] (1978), 438 U.S. 59.

> private development of nuclear-produced energy.[20]

Of course, many American states have enacted threshold or no fault schemes for motor vehicle accidents. None as yet have been considered by the United States Supreme Court, but as Professor Hogg observes, there has been extensive litigation in state courts, and constitutional challenges have generally been unsuccessful. I consider these cases in the discussion of section 15 of the Charter.

(d) Section 15 of the Charter

Section 15(1) provides as follows:

> 15.(1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

The argument that section 15 is infringed by a no fault scheme is that the victims of motor vehicle accidents are treated differently from the victims of other kinds of accidents. A further argument made with respect to threshold schemes is that there is inequality between motor vehicle accident victims themselves in that some maintain the right to sue while others do not.

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[20] Duke Power Co. v. Carolina Environmental (1978), 438 U.S. 59.

It is clear from the language of section 15 that the enumerated grounds of discrimination are not exhaustive and that other non-enumerated grounds can violate section 15. It also seems clear that not every legislative distinction contravenes section 15 because if that were the case virtually every statute would fall on that basis. What is not yet clear is what non-enumerated grounds are forbidden by section 15. A number of provincial appellate courts have considered this issue.

In Re Andrews and The Law Society of British Columbia,[21] Madam Justice McLaughlin of the British Columbia Court of Appeal set out the general proposition that:

> The essential meaning of the constitutional requirement of equal protection and equal benefit is that persons who are similarly situated be similarly treated and conversely that persons who are differently situated be differently treated.

In our own Court of Appeal, Mr. Justice Morden in R. v. R.L.[22] stated:

> ... The essentially relational nature of equality has been described as follows: 'The concept of equality is, by definition, relational or comparative. A person can only be found to be equal in relation to or in comparison with some other person who serves as a standard or criterion.' Monroe H. Freedman, 'Equality in the Administration of Criminal Justice', Nomos IX (1967) 250 at pp. 253-4. The concern for equality is that those who are similarly situated with respect to the purpose of the law be treated similarly: see Tussman

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[21] (1986), 27 D.L.R. (4th) 600. The case has been argued in the Supreme Court of Canada and judgment is under reserve.

[22] (1986), 26 C.C.C. (3d) 417.

> and tenBroek...and Re McDonald and the Queen...referring to the Tussman and tenBroek article.

In my opinion, it can be fairly argued that motor vehicle accident victims and other accident victims are not similarly situated. Automobile insurance, both for third party and limited first party coverage, is compulsory; automobile accident victims have some, albeit limited, no fault benefits; driving is a pervasive and dangerous activity; other accident victims (for example, workers) have been denied the right to sue. If motor vehicle accident victims are not similarly situated, there has been no denial of equality.

If they are similarly situated, then the crucial question is whether the difference in their treatment constitutes discrimination within section 15. Provincial appellate courts and the Federal Court of Appeal have disagreed on the proper interpretation of the words "without discrimination" in section 15(1). One view is that the words should be read in a neutral sense with the result that any legislature distinction would violate section 15(1) and would have to be justified under section 1.[23] At the other end of the spectrum is the view that "discrimination" in section 15(1) is not neutral but connotes treatment which is both pejorative and unreasonable. The notion that there is some standard of "reasonableness" within section 15(1) is reflected in the judgment of Madam Justice McLaughlin in Andrews.[24] On this view, there is little room left for the operation of section 1.

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[23] Professor Hogg took this view in his text. He now concedes it is a minority view. I consider the section 1 issue separately.

In its judgment in the university mandatory retirement cases, McKinney v. University of Guelph et al.,[25] released December 10, 1987, the Ontario Court of

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[24] In Andrews, Madam Justice McLaughlin held:

> My response to the first question [about the nature of the analysis under s. 15] is that the question to be answered under s. 15 should be whether the impugned distinction is reasonable or fair, having regard to the purposes and aims and its effect on persons adversely affected. I use the word 'fair' as well as 'reasonable' to emphasize that the test is not one of pure rationality but one connoting the treatment of persons in ways which are not unduly prejudicial to them. The test must be objective, and the discrimination must be proved on a balance of probabilities: R. v. Oakes, supra (applying this test to s. 1). The ultimate question is whether a fair minded person, weighing the purposes of legislation against its effects on the individuals affected, and giving due weight to the right of the Legislature to pass laws for the good of all, would conclude that the legislative means adopted are unreasonable or unfair.

Andrews was referred to with approval by the Ontario Court of Appeal in R. v. Century 21 Ramos Realty (1987), 58 O.R. (2d) 737 and in British Columbia in Re Cramer and B.C. Teachers Federation (1986), 29 D.L.R. (4th) 681; however, the Andrews approach was rejected by the Nova Scotia Court of Appeal in Reference Re Family Benefits Act (1986), 75 N.S.R (2d) 338 and by the Federal Court of Appeal in Smith, Kline & French et al. v. Attorney General of Canada (1986), 12 C.P.R. (3d) 385. The Supreme Court of Canada has yet to address this issue.

[25] Unreported. The judgment of Mr. Justice Gray at trial is reported at (1986), 57 O.R. (2d) 1. The Court of Appeal sat as a five-man court. Mr. Justice Blair dissented on

Appeal rejected both the neutral and the Andrews interpretations of "discrimination". Instead, it adopted an interpretation which lay between these two positions. In the opinion of the Ontario Court of Appeal "discrimination" within section 15(1) comprises "treatment which, viewed objectively, is tangibly adverse, unfavourable or prejudicial".[26] The Court rejected the view that an applicant must demonstrate that the impugned legislation is also unreasonable or unfair to make out a prima facie breach of section 15(1). The Ontario Court of Appeal concluded that reasonableness is an issue which must be determined within the context of section 1.[27]

In my opinion, while one can agree or disagree with the policy behind a no fault scheme, it would meet the test set out by the Ontario Court of Appeal in McKinney. Legislation providing an adequate level of benefits delivered in a timely fashion without regard to fault, and emphasizing rehabilitation, should not be considered adverse, unfavourable or prejudicial having regard to the purposes of such legislation.[28]

I agree with Professor Hogg's observation that while a universal system of no fault compensation would satisfy

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the application of s. 1 of the Charter.

[26] Unreported Reasons, p. 55.

[27] This very much affects the onus. A party challenging legislation obviously has a lesser burden if he or she does not have to demonstrate "unreasonableness" as Andrews seems to require.

[28] A fortiori an automobile no fault scheme would not infringe subsection 15(1) on the Andrews test.

section 15, it is also constitutional for reform to proceed in stages. The judgment of the Supreme Court of Canada in Edwards Books and Art Limited v. The Queen[29] indicates that the Legislature is entitled to be selective in its decisions about how far to go in addressing social problems. Just as in the Edwards Books case, the Legislature did not have to provide a "pause day" for all workers in order for the legislation protecting some workers[30] to be valid, so too legislation does not have to provide no fault coverage for all accident victims before a scheme for motor vehicle accident victims will be upheld.

The C.B.A.O. constitutional opinion relies heavily on three trial judgments--Piercey Estates v. General Bakeries Ltd.,[31] Streng v. Township of Winchester[32] and Kask v. Shimizu[33]--to support its submission that a no fault or threshold scheme would violate section 15 of the Charter.

Only Piercey raises a similar issue. In that case, Chief Justice Hickman, at trial, concluded that the denial of the right to sue in tort, found in section 32 of the Newfoundland Workers' Compensation Act, contravenes section 15 of the Charter.[34] Both Professor Hogg and Finkelstein are of the opinion that the Piercey case was wrongly decided at trial. Their opinions have been reinforced by the Newfoundland Court of Appeal in a decision rendered October 23, 1987. The five-member court, on a Reference which had its roots in the Piercey case, unanimously decided that section 32 of the Newfoundland statute is constitutional. Chief Justice Goodridge for himself and three others stated:

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[29] [1986] 2 S.C.R. 713.

[30] Workers in retail stores only.

[31] (1986), 31 D.L.R. (4th) 373.

[32] (1986), 56 O.R. (2d) 649.

[33] (1986), 28 D.L.R (4th) 64.

> The workers and their dependants to whom the Act applies are deprived of the benefits which might otherwise be available to them but have all the benefits available to them under the Act. The Legislature has ordained that some

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[34] The ruling on section 15 was not strictly necessary for the decision because the facts of the case arose in 1984, before section 15 came into force. The decision was contrary to Re Terzian and W.C.B. (1983), 42 O.R. (2d) 144, where Mr. Justice Krever for the Ontario Divisional Court said:

> We are all of the view that the right to bring action for damages in the circumstances of this case is not a matter that falls within the meaning of 'security of the person' as those words are found in s. 7 of the Canadian Charter of Rights and Freedoms.
>
> Nor do we think that it can be said that the plaintiffs are denied any Charter-protected rights otherwise than in accordance with the principles of fundamental justice.
>
> Finally, and in any event, if it were necessary so to decide, we add that we are not persuaded that s. 15 of the Workmens' Compensation Act cannot be demonstrably justified in a free and democratic society. Moreover, s. 26 of the Charter does not assist the applicants.

To the same effect see Re Ryan (1984), 28 A.C.W.S. (2d) 203 (Div. Ct.) and Budge v. Workers' Compensation Board (1985), 1 W.W.R. 437 (Alta. Q.B.).

> will receive more, some will receive less, than they otherwise might. This is the manner that has been chosen to structure the social regime of Workers' Compensation.
>
> It is not required that the Legislature choose the best method. The Charter does not, and the Court cannot, require that legislative policy be perfect. If the scheme is reasonable and fair when viewed globally, it will not be condemned, notwithstanding that it may have imperfections...
>
> The Charter was not designed to interfere with beneficial social programs of the Legislature. It was not designed to regulate or patrol these programs. Only where there is contained in the program something that is unfair or unreasonable will courts interfere.
>
> The workers' compensation scheme provides a stable system of compensation free of the uncertainties that would otherwise prevail. While there may be those who would receive less under the Act than otherwise, when the structure is viewed in total, this is but a negative feature of an otherwise positive plan and does not warrant the condemnation of the legislation that makes it possible. Judicial deference to the legislative will is required here.
>
> Upon an overview, the scheme of compensation under the Act cannot be said to be either unfair or unreasonable. While there may be inequalities, there is no discrimination and the legislation cannot be condemned as being inconsistent with s. 15(1) of the Charter.

Mr. Justice Morgan delivered a separate concurring opinion in which he stated:

> Accepting that the classification of industrial workers into a separate category for the purposes of the Act is valid, the question for determination is whether section 32 creates an inequality by depriving workers and their dependants of a 'right of action' against an employer for work-related injuries or death. In my respectful opinion it does not. All workers are entitled to the benefit provided by the

> Act and regulations. In return for those statutory benefits, the 'right of action' to assert a claim for compensation in tort is taken away from all. To find an inequality by comparing those covered by the Act with those not so covered and therefore free to take an action in tort one must ignore the underlying purpose of the Act and the myriad of benefits enjoyed by those covered by the Act and not available to those others. In my view any economic loss that may be sustained by the taking away of the 'right of action' for work-related injuries is more than off-set by the overall benefit of the Act and is a necessary incident to the implementation of a valid legislative scheme.

The decision is consistent with other provincial case law holding that workers' compensation legislation does not violate the Charter. In my view, similar reasoning may be applied to automobile no fault plans.

In Streng, Mr. Justice Smith struck down the three-month limitation period applicable to actions against municipalities as being contrary to section 15 of the Charter. Mr. Justice Smith in his judgment, accepted that motor vehicle accident victims could be treated as a distinct class without violating section 15 of the Charter. In his reasons, he stated:

> ...s. 15 should be so interpreted as to allow the courts to strike down all irrelevant or unreasonable classifications that result in certain individuals having the benefit of a law or the protection of a right, in this instance the right to claim damages, and yet in the case of other individuals similarly situated having the same right taken away. The class created here is that of persons suffering personal injuries as a result of the negligence of others. The class may be further narrowed by including only those suffering injuries in car accidents. All members of such a class are

> entitled to expect in the normal course, to be treated alike.[35] [emphasis added]

Thus, Streng provides no support for a constitutional attack on an automobile no fault plan. Moreover, Streng was not followed in the later Ontario case of Mirhadizadeh v. The Queen.[36]

The last case is Kask in which Mr. Justice MacDonald of the Alberta Queen's Bench struck down a rule of practice requiring non-resident plaintiffs to post security for costs. Again, other courts faced with the same issue have taken a different view.[37] Differentiation based on poverty or place of residence is much harder to justify than the differentiation being dealt with here.

In summary, of the main cases relied upon by the C.B.A.O. opinion, the most important one has been overturned and the other two are in my view of no assistance to its position.

(e) Threshold Schemes

Having concluded that a no fault scheme does not infringe section 15 of the Charter, the remaining issue is whether section 15 is infringed by a threshold plan in which the right to sue in tort is preserved for some but not all motor vehicle accident victims.

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[35] See footnote 27 at p. 657.

[36] (1986), 57 O.R. (2d) 441.

[37] Singh v. Dura, [1987] 4 W.W.R. 549 (Alta. Q.B.); Nissho Corp v. Bank of British Columbia et al. (1987), 39 D.L.R. (4th) 453 (Alta. Q.B.).

In the United States, the 14th Amendment guarantees "The equal protection of the laws". Equal protection has been interpreted in American courts as requiring a rational basis for legislative differentiation. The rational basis test requires that the impugned legislation must be a reasonable means to achieve a legitimate public purpose.[38] It is a test which is similar to that propounded in Andrews.

Many of the American threshold plans have been attacked on equal protection grounds. As Professor Hogg observes, only in rare instances have U.S. courts struck down these plans.[39] In an Opinion of the Justices,[40] a majority of the Supreme Court of New Hampshire held that elimination of the right to recover damages for pain and suffering below a prescribed threshold did not violate either state or federal constitutional provisions. The Court held in part:

> Those injured persons who do not meet the threshold are not left without remedy. A new system of recovery is substituted for the existing remedy. It is similar in many respects to our Workmen's Compensation Act...The constitutionality of such statutes, which have been considered as reforms of the common law of torts, is not 'firmly established'... We are of the opinion that this similar reform in the law relating to automobile injuries also meets due process requirements. The threshold used as a criterium to delineate when damages for pain and

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[38] United States courts apply a stricter test to "suspect" categories, for example, race.

[39] Josephine King, "Constitutionality of No-Fault Jurisprudence," Utah L. Rev. 4 (1982):797.

[40] (1973), 304 A (2d) 881.

> suffering are recoverable and when they are not cannot be said to be arbitrary or unreasonable... We are of the opinion that House bill 79 bears a rational relation to a legitimate legislative objective and provides a reasonable substitute for existing rights. Pinnick v. Cleary...

With respect to determining the threshold, the Court said that the appropriate test is whether the threshold

> ...would have a fair and substantial relation to the object of the legislation. There is no mathematical or logical way of fixing this point with precision. The judgment of the legislature must be accepted unless it is very wide of any reasonable line of demarcation.[41]

In Pinnick v. Cleary,[42] the Supreme Judicial Court of Massachusetts upheld that state's threshold plan holding, in part, that a cause of action in tort for personal injury sustained in a motor vehicle accident is not a vested property right which could not be altered or abolished by a statute creating a no fault personal injury insurance system. The Court was of the view that no person has a vested interest in a rule of law so as to entitle him to insist that it shall remain unchanged for his benefit. Reardon, J. stated:

> We thus perceive no basis for treating a legislative alteration of the tort action for personal injuries differently from an alteration of any other preexisting role of the common law. Hence we may summarily dispose of several of the plaintiff's arguments which are founded on the contrary premise. There is no cause here for application of the 'compelling state interest' test, which is employed where a

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[41] Opinion of the Justices (1973), 304A (2d) 886.

[42] 271 N.E. (2d) 592.

> statute impairs fundamental rights protected by the Constitution.[43]

In Shavers v. Kelley,[44] the Supreme Court of Michigan approved the constitutional validity of Michigan's threshold no fault plan, although it found certain aspects of the legislation unconstitutional and gave the Legislature 18 months from the date of the opinion to remedy the defects. The Court was of the opinion that the Legislature need not provide an adequate substitute remedy before abolishing a common law cause of action at tort, as long as the legislation bears a reasonable relationship to a permissible legislative objective.

With respect to equal protection, the majority of the Court said:

> The treatment of motor vehicle tortfeasors differently from all other tortfeasors does not violate the traditional test for equal protection. Exhibits were introduced at trial to show that motor vehicle accidents have consistently and by a wide margin been the principal cause of accidental injury and death in Michigan... The legislative judgment ... is justified by the predictably frequent and serious injury to persons and property resulting from the use of motor vehicles.[45]

Finally, in Gentile v. Altermatt,[46] the Supreme

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[43] Pinnick v. Cleary, 271 N.E. (2d) 600-601.

[44] (1978), 267 N.W. (2d) 72, certiorari denied at 442 U.S. 934.

[45] Shavers v. Kelley (1978), 267 N.W. (2d) 99.

[46] (1976), 363 A (2d) 1; appeal dismissed for want of a substantial federal question at 423 U.S. 1041.

Court of Connecticut upheld that state's threshold legislation. The Court said:

> The concept of general damages has been lost sight of and, in its place, there has emerged a system of frequent overcompensation for victims with minor injuries which, in effect, represent the price paid by liability insurers to forego the long, extensive process of litigation. An unfortunate concomitant of this has been the under-compensation of cases of a truly serious nature. If anything, the Act tends to be an equalizer, providing the more seriously injured the opportunity to seek true redress. Certainly, those injured who hover on either side of the $400.00 threshold may suggest imperfections in this system, in that one who incurs $399.99 in allowable expense fails to satisfy that criterion for exemption, while another incurring $400.01 in expenses is exempted. Yet in every instance where a line must be drawn or a cutoff established, there are those who fall directly on either side. This is but one of the vagaries of life to which we accustom ourselves and which we accept in our daily affairs, but we cannot, for this reason, find the Act unreasonable in its purpose and overall effect. We rely, instead, on the thought that no matter to which side of the line a party is placed his remedies are sufficient and reasonable.[47]

Any threshold plan is to some extent arbitrary; but one which seeks to remove less serious injuries from the tort system in order to fund the plan is justified in constitutional terms.

Threshold schemes are more constitutionally vulnerable than pure no fault schemes, but I am satisfied that a reasonable threshold scheme would on balance survive constitutional challenge under the Charter.

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[47] Gentile v. Altermatt (1976), 363A (2d) 77.

(f) Section 1 of the Charter

Since in my opinion no fault and threshold schemes do not violate either section 7 or section 15 of the Charter, resort to section 1 is unnecessary. If, however, I am incorrect in that assessment, in my view, a no fault scheme would be justified under section 1.

Section 1 of the Charter provides:

> The Canadian Charter of Rights and Freedoms guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.

In R. v. Oakes, the Supreme Court of Canada set out the test to be met to save legislation under section 1.[48] First, the objective of the law must be "of sufficient importance to warrant overriding a constitutionally protected right or freedom". Second, the means used to accomplish the objective must be reasonable and demonstrably justified. This requires a three-fold proportionality inquiry: (a) the law must "be carefully designed to achieve the objective"; (b) it must "impair as little as possible the right in question"; and (c) it must not be disproportionally severe in its impact on the person whose right is limited.

The provision of guaranteed, speedy and comprehensive coverage to motor vehicle accident victims is surely a sufficiently important objective to satisfy the first test. Again, Edwards Books[49] is clear that a court will defer to a reasonable legislative judgment as to how far to go in addressing a social concern. Nor is there any reason to think that a reasonable no fault plan would not meet the proportionality requirements set out in Oakes.

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[48] [1986] 1 S.C.R. 103.

B. CONSTITUTIONALITY OF NO FAULT BENEFITS

I also asked Professor Hogg to consider two specific constitutional questions in relation to the delivery of no fault benefits. The first question is whether a loss of income indemnity that terminates at age 65 infringes section 15. The second question is whether there are any constitutional difficulties in compensating non-income earners (for example students and housekeepers) on a no fault basis.

(a) Age-Based Entitlement

For the purpose of entitlement to disability benefits under Section B of the current standard automobile policy, an age distinction is made between those persons actively employed at the date of the accident and those deemed to be employed by virtue of being employed for 6 months of the preceding 12 months. For those deemed to be employed, entitlement to disability benefits commences at age 18 and terminates at age 65. For those actively employed, disability benefits begin at age 16 and continue, without regard to age, so long as the person remains entitled. My recommendation would allow those deemed to be employed to receive benefits commencing at age 16. The I.B.C. proposal recommends terminating entitlement to disability benefits for those actively employed as well as those deemed to be employed at age 65. My recommendation would terminate entitlement at age 65 only for those deemed to be employed.

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[49] See footnote 29.

A number of constitutional issues arise out of these proposals:

(i) In my view while the use of age 65 may well be vulnerable to a section 15 challenge, in the context of its use as a cutoff point for eligibility for no fault automobile disability benefits (for the employed and probably for the deemed to be employed), the use of age 65 would likely be justified under section 1 of the Charter. The rationale for an age 65 termination is that 65 is still the usual retirement date when earned income stops and government income support or tax assisted private income support begins. The university mandatory retirement cases[50] have used similar reasoning to uphold age 65 retirement rules.[51]

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[50] McKinney v. University of Guelph (1986), 57 O.R. (2d) 1; affirmed by the Ontario Court of Appeal December 1987. In McKinney, the issue was whether the definition of "age" in section 9(a) of the Ontario Human Rights Code (limited to ages 18 to 65) contravened the Charter. The majority of the Court of Appeal upheld the provision under section 1 of the Charter in its application to university mandatory retirement policies. The Court emphasized it was not deciding the issue of mandatory retirement at age 65 outside the university context.

[51] See also Harrison v. University of British Columbia (1986), 30 D.L.R. (4th) 206; (reversed on appeal; 1987 unreported).

This point is somewhat academic in light of my recommendation not to terminate disability benefits at age 65, except for the deemed to be employed.

(ii) It would not, in my view, offend section 15 of the Charter to distinguish between those actively employed and those deemed to be employed by providing an age 65 termination date for the latter.

(iii) One area of constitutional difficulty is the use of age 18 as a commencement date for entitlement to disability benefits for those deemed to be employed. Persons aged 16 and 17 are qualified to drive and to work. There is no issue of a usual retirement date. In my view a good case can be made for saying that the age 18 commencement date for those deemed to be employed infringes section 15 and cannot be justified under section 1 of the Charter.

(b) Allowance for Non-Income Earners

This does not appear to raise any constitutional problem. Students and homemakers have no actual income loss. Accordingly, they have to be compensated on a basis that is somewhat arbitrary. As Professor Hogg observes, any bona fide attempt to deal fairly with them will not violate section 15 of the Charter.

C. RATING ON THE BASIS OF AGE, SEX AND MARITAL STATUS

As I have discussed in Chapter 7, the classification system used by Ontario automobile insurers has for a number of years included age, sex and marital status as rating factors. The use of these criteria for rating purposes is restricted to those insureds under age 25.

Both accident data and the claims experience of the industry indicate that drivers under age 25 have, on average, more accidents than those over 25; that men under 25 have more accidents than women under 25; and that single males under 25 have more accidents than married males under 25.[52] Age, sex and, to a lesser extent, marital status appear to be important indicators of accident probability.

In the last decade, age, sex and marital status have come under attack as being socially, ethically and legally unacceptable particularly having regard to the provisions of provincial human rights legislation and now sections 15 and 28 of the Charter. In October 1985, a Board of Inquiry[53] found that an insurer using age, sex and marital status as rating factors was in breach of sections 1 and 3 of the Ontario Human Rights Code which provide as follows:

> 1. Every person has a right to equal treatment with respect to services, goods and facilities, without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed,

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[52] See the discussion in Chapter 7.

[53] Re Bates and Zurich Ins. Co., [1985] I.L.R. 1-1942.

> sex, age, marital status, family status or handicap.
>
> 3. Every person having legal capacity has a right to contract on equal terms without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, age, marital status, family status or handicap.

The Board held that the insurer could not bring itself within the exception in section 21 which reads as follows:

> 21. The right under sections 1 and 3 to equal treatment with respect to services and to contract on equal terms, without discrimination because of age, sex, marital status, family status or handicap is not infringed where a contract of automobile, life, accident or sickness or disability insurance or a contract of group insurance between an insurer and an association or person other than an employer, or a life annuity, differentiates or makes a distinction, exclusion or preference on reasonable and bona fide grounds because of age, sex, marital status, family status or handicap.

The Board of Inquiry held that the insurer's rate classification system for automobile insurance, with its use of the group factors of age, sex and marital status, was not "reasonable and bona fide". This decision, however, was reversed by the Divisional Court on appeal.[54] The Court, in its reasons, said the following:

> In short, the current classification system, although subject to future revision and current doubts, does embody distinctions supported by reasonable, actuarially verified statistics.

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[54] Re Bates and Zurich Ins. Co., [1987] I.L.R. 1-2148.

The question I wish to address here is whether the use of either age or sex as rating criteria offends section 15 (and, in the case of sex, section 28) of the Charter. I am less concerned about "marital status" as it would appear that the insurance industry itself has no particular interest in preserving it as part of the classification system.

In considering the Charter question, I have reviewed Professor Hogg's thoughtful opinion to the I.B.C. in August 1983.[55] Although written well before section 15 was proclaimed in force and therefore before any jurisprudence on the equality provisions of the Charter, it nevertheless provides a useful analysis of the relevant issues.

A threshold issue is whether the Charter has application to the classification system now used by Ontario's automobile insurers. In the very recent case of Retail, Wholesale and Department Store Union, Local 580 v. Dolphin Delivery Ltd.,[56] the Supreme Court of Canada confirmed the prevailing view that, by reason of section 32(1), the Charter does not apply to private activity, but applies only to relations between the individual and government. Some degree of government intervention, whether it be executive, administrative or legislative, is required to make the Charter applicable.

Since government approval for Facility Association rates is required by statute, it is reasonable to conclude that the industry's rating criteria in the residual market are subject to the Charter.[57] Whether the rating practices of the industry in the voluntary market are subject to the Charter is a more difficult question. While premium rates in the voluntary market are unregulated, there is still fairly extensive governmental intervention in the automobile insurance industry. Automobile insurance is compulsory; private insurers are required to be licensed; the Statutory Conditions of the automobile insurance policy as the name implies are prescribed by statute; the Superintendent of Insurance exercises supervisory power over the industry. While the question is not free from doubt, I agree with Professor Hogg that on balance the Charter does not apply to the classification system and rating practices of Ontario's insurers in the voluntary market.[58]

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[55] Appendix XII.

[56] (1986), 33 D.L.R. (4th) 174.

The situation will be entirely different if Ontario passes into law the Automobile Insurance Board Act[59]. The draft legislation contemplates that the classification system will be prescribed by Cabinet by regulation. In that event, the classification system and the rating factors that are prescribed will be subject to the Charter. I pause to observe that, insofar as age, sex and marital status are concerned, the question may be academic since the government has clearly indicated these factors are not to be used in the new classification system.

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[57] Compulsory Automobile Insurance Act, R.S.O. 1980, c. 83, s. 10.

[58] Further support for this conclusion may be found in the reasons of the Ontario Court of Appeal in McKinney v. University of Guelph et al. (judgment released December 10, 1987).

[59] See the discussion in Chapter 16.

To the extent the Charter does apply to the industry's rating criteria and to the extent age and sex may still be considered as appropriate factors, I offer a few tentative observations as to whether their use might infringe sections 15 and 28.

I agree with Professor Hogg that the use of age as a rating criterion is more likely to survive a Charter challenge than the use of sex.[60] Age has been used as a regulatory criterion in a wide range of activities--there is a minimum drinking age, a minimum age for obtaining a driver's licence, a minimum age for voting and so forth. It can at least be said that "youth is a 'disability' that every member of the community suffers in the course of his or her lifetime".[61] Age is not merely a proxy for driving experience; it is a predictive factor in its own right. Further, age has been accepted by courts both in Canada and the United States as meeting constitutional requirements of equality so long as there is a reasonable or rational basis for the distinction.[62]

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[60] In McKinney v. University of Guelph, the Ontario Court of Appeal rejected the view that there are different standards of scrutiny to be applied to the different grounds of discrimination in subsection 15(1). The extent that different section 15 rights are to be ranked differently is to be addressed by the Standard of review called for by section 1 of the Charter.

[61] Rea and Trebilcock, Rate Determination.

[62] See footnotes 46-48.

On the other hand, as Professor Hogg's opinion demonstrates, sex-based classifications are becoming increasingly difficult to maintain in the face of constitutional challenge.[63] Unlike age, sex is no more than a proxy; it is not predictive of accident probability in its own right. One important American case on the subject is Craig v. Boren[64] in which a state law prohibiting the sale of beer to males under 21 and females under 18 was struck down by the United States Supreme Court as violating the constitutional right to equal protection. Even though the state produced statistical evidence showing that young men were arrested for alcohol-related offences more frequently than young women, that they were killed in traffic accidents more frequently and that drunkenness was a factor in many accidents, Mr. Justice Brennan for the majority held "the showing offered by the (government) does not satisfy us that sex represents a legitimate, accurate proxy for the regulation of drinking and driving."[65]

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[63] In addition to the American cases cited by Professor Hogg, see for example Re Blainey and Ontario Hockey Association (1986), 26 D.L.R. (4th) 728 (C.A.).

[64] (1976), 429 U.S. 190.

[65] See also Los Angeles Department of Water and Power v. Manhart (1978), 435 U.S. 702 and Arizona Governing Committee v. Norris (1983), 463 U.S. 1073. In these two cases, the Supreme Court of the United States prohibited gender-based distinctions in insurance as being contrary to Title VII of the Civil Rights Act of 1964. While neither decision dealt with the equal protection clause of the 14th Amendment, nonetheless the Court held that sex-based classifications in state pension plans were not lawful even though supported by actuarial evidence and life expectancy tables.

The difficulty of upholding sex-based distinctions in Canada is compounded by section 28 of the Charter. Given the absolute language of section 28 and the climate of public opinion in favour of sexual neutrality, it may well be the case as Professor Hogg concludes that the Supreme Court of Canada would be very reluctant to approve the use of sex as part of an insurer's classification system.

Before one comes to a final determination as to whether either classifying on the basis of age or sex infringes the Charter, it seems to me what is required is a more informed discussion of the alternatives. An assessment of the alternatives is important to determine whether age and sex are legitimate distinctions within section 15 or can be justified under section 1 of the Charter.[66] In practical terms, further consideration ought to be given to the extent to which neutral classification factors can be developed which are accurate substitutes for age or sex. These substitute factors will have to be measured against the generally accepted criteria for establishing cells within a classification system.[67] A further study of these issues is in my view critical before one too readily concludes that using age or even sex as rating factors infringes the Charter.[68] Constitutional issues aside, substitutes for age and sex as premium rating criteria should be exposed to ongoing assessment and evaluation.

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[66] I assume that sex discrimination may be justified under section 1 of the Charter notwithstanding the language of section 28.

[67] See for example Risk Classification -- A Statement of Principles by the Canadian Institute of Actuaries.

[68] See Rea and Trebilcock and see also Ryan, "The Elimination of Gender Discrimination in Insurance Pricing."

CHAPTER 15

PUBLIC OR PRIVATE AUTOMOBILE INSURANCE

A. INTRODUCTION

In four provinces in Canada (Saskatchewan, Manitoba, British Columbia and Quebec) automobile insurance is delivered by a government controlled monopoly. In Quebec, government delivery of automobile insurance is combined with a pure no fault system of compensation for motor vehicle accident victims. In the three western provinces which have public delivery systems, compensation for personal injuries is, as in Ontario, through the tort system with add on no fault accident benefits.

My terms of reference require me to consider whether Ontario should have public or private automobile insurance. This issue received scant consideration in the Report of the Ontario Task Force on Insurance. After recommending a no fault accident compensation system, the Report, without any elaboration, stated:

> The delivery of the no-tort accident compensation system should remain primarily in the hands of the private insurance industry -- at least so long as private insurance can demonstrate that it has the financial capacity to design and administer such a scheme at affordable premium levels.[1]

and,

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[1] Ontario Task Force on Insurance, A Pre-Publication of the Final Report (1986), Vol. I, p. 102.

> The basic scheme that is envisaged by the Task Force is a no-tort accident insurance policy designed and delivered by private industry...
>
> The Task Force believes that in Ontario the private insurance industry should have the opportunity to demonstrate whether and to what extent it can be counted on to deliver the insurance product.[2]

The Task Force's recommendation did not put the matter to rest. In the last year and a half the issue of public or private delivery of automobile insurance has received increasing attention in Ontario.

The New Democratic Party made a public automobile insurance system a basic policy position and an important part of its campaign platform in the most recent provincial election. Published comparisons of premiums for particular classes of drivers as between Ontario and the public systems has infused public awareness of the issue. The Ontario Government's announced freeze on premiums last April and its subsequent introduction of rate regulation legislation may be viewed at least in part as a response to the call for a public automobile insurance corporation.

Those who call for a public delivery system assume implicitly that there will be no private sector competition at least for the compulsory portion of the insurance product. In other words, it has been readily assumed that a publicly run automobile insurance corporation will be given a monopoly position in the sale of automobile insurance. This is indeed the situation that prevails in the four provinces that have public delivery systems. Competition is permitted only on optional coverage in British Columbia, Saskatchewan and Manitoba.[3] It is noteworthy that in Manitoba the Manitoba Public Insurance Company (M.P.I.C.) has both an automobile insurance division and a general insurance division. The former is given a monopoly position by statute; the latter, however, is required to compete with the private sector.

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[2] Ontario Task Force on Insurance, A Pre-Publication of the Final Report (1986), Vol. I, pp. 102-103.

To the extent one seeks guidance from the experience of delivery systems in other jurisdictions with public delivery systems, I think it is a far more useful exercise to consider Saskatchewan, Manitoba and British Columbia (and especially the latter two provinces)[4] than Quebec. At least in the western provinces, the compensation system in place and the compulsory portion of the automobile insurance policy are similar to what exists in Ontario. By holding these elements constant, one can obtain a more meaningful comparison of the different delivery systems. In Quebec, the compensation and delivery systems are different from those in Ontario. With neither the delivery system nor the compensation system the same, a meaningful comparison of public or private delivery as between Ontario and Quebec would be extremely difficult, time consuming and costly.

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[3] In the western provinces with public plans, private insurers cannot sell the compulsory portion of the product. They can compete on optional coverage. In practice, their market is very limited or non-existent. In Quebec private insurers sell collision coverage.

[4] The rating structure used in Manitoba and British Columbia permits a better comparison of the delivery systems. See the discussion later in this chapter.

As I will make frequent reference to the delivery of automobile insurance in Saskatchewan, Manitoba and British Columbia, a brief summary of the plans in place in those provinces is in order.

B. THE PUBLIC DELIVERY SYSTEMS IN WESTERN CANADA

Saskatchewan was the first province in Canada to engage in the insurance business. In 1944, the provincial government established a public corporation, the Saskatchewan General Insurance Office (S.G.I.O., now S.G.I.), to carry on the business of general insurance. In 1946, responding in part to the fact that only 12% of the province's motorists were insured, the Saskatchewan Legislature enacted the Automobile Accident Insurance Act. Pursuant to this statute, the S.G.I.O. was given exclusive rights to the compulsory portion of the automobile insurance market. The Saskatchewan plan is known as the Auto Fund. Effective January 1, 1984, the Auto Fund became a separate legal entity, although it continues to be administered by S.G.I.

In Manitoba, public automobile insurance emerged from the report of the Manitoba Automobile Insurance Committee which was established in 1969. The Committee recommended "A compulsory system of automobile insurance for all Manitoba residents to be administered by a crown corporation". The M.P.I.C. was established pursuant to the Manitoba Automobile Insurance Act 1970. The M.P.I.C. commenced operations November 1, 1971 to administer, as the exclusive supplier in the province, a comprehensive automobile insurance plan known as Autopac. Statutory amendments in 1974 gave the M.P.I.C. legislative authority to operate in other fields of insurance. In July 1975, the M.P.I.C. commenced the operation of its general insurance division in competition with the private sector.

The Insurance Corporation of British Columbia (I.C.B.C.), a provincial Crown corporation, was created in 1973 with authority to engage in and carry on all classes of insurance. The I.C.B.C. opened its doors to the public March 1, 1974. Its General Insurance Services Division was sold to the private sector in February 1985. As a result, the I.C.B.C.'s sole responsibility is to administer Autoplan, the compulsory automobile insurance programme established under the British Columbia Automobile Insurance Act.

It is to be noted that the public automobile insurance plans in British Columbia, Saskatchewan and Manitoba operate as monopolies. Private sector insurers are foreclosed by statute from competing with the public plans.[5]

Coverage under the public plans in the western provinces is quite similar to coverage in Ontario. In all four provinces, third party liability, no fault accident benefits and uninsured/unidentified motorist coverage is compulsory. The mandatory third party liability limits are the same, $200,000. The right to sue in tort has not been removed or limited. Accident benefit payments are deducted from judgments obtained against third parties.

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[5] Competition is foreclosed on compulsory coverage.

There are also differences. In Manitoba and Saskatchewan, collision coverage is mandatory; in Ontario and British Columbia it is optional. The level of accident benefits varies in the different provinces. For example, the maximum weekly income indemnity in Ontario is $140/week compared to $300 in Manitoba. The maximum medical and rehabilitation expense payment is $25,000 in Ontario, compared to $10,000 in Saskatchewan, $20,000 in Manitoba and $100,000 in British Columbia. These differences have a minimal effect on premiums.

In addition to the compulsory automobile insurance package, excess coverage on an optional basis is available in all four jurisdictions. In each of the western provinces, the private sector is permitted to compete with the public plan for the optional business. In practice, however, because of the advantages of "one-stop shopping", all three Crown corporations account for a major share of the excess coverage market in their respective provinces.

C. LIMITATIONS OF COMPARATIVE ANALYSIS

I turn from this brief description of the public plans in operation in western Canada to a comparative analysis of the advantages and disadvantages of public and private automobile insurance systems. I do so in order to assess whether the establishment of a provincial Crown corporation for the delivery of automobile insurance in Ontario is in the public interest.

At the outset, I think it is important to recognize the limitations which circumscribe this comparative exercise. First and foremost is the lack of relevant data. Published studies of the subject are scarce. When the Inquiry began there was in existence a report by the management consulting firm of Woods, Gordon & Co.--"Government Ownership of Automobile Insurance"--published in 1978 for the Ontario Select Committee on Company Law, but little else. This lack of material was compounded by the fact that empirical data from the I.C.B.C., the M.P.I.C. and the S.G.I. were also scarce. Neither the I.C.B.C., the M.P.I.C. nor S.G.I. are required to file information with the Federal Superintendent of Insurance, nor do they provide statistical experience data to the Insurance Bureau of Canada. Effectively, all that is available in published form are the rather sketchy data that are found in the annual reports of each Crown corporation.

Accordingly, I commissioned a research project which addressed both the state of competition in the Ontario automobile insurance industry and an efficiency comparison of the private sector delivery system in place in Ontario and the public sector delivery systems in place in British Columbia, Manitoba and Saskatchewan.[6] Counsel and I also travelled to western Canada where we held extensive discussions with those responsible for administering the public plans in each province as well as with other groups that came into contact with these plans. I am grateful for the time and cooperation given by those who spoke to us.

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[6] See Inquiry Research Study II. I also considered the Woods, Gordon Report referred to above. Because it is often referred to and because there is a scarcity of other data, I regard the Woods Gordon Report as important. I have dealt with it separately in a later section of this chapter.

A second limitation to a proper comparison is that public plans operate under a different set of constraints than do private automobile insurers. In fact, the public plans themselves are not identical with the I.C.B.C. at the one end operating more like a private insurer and the S.G.I./Auto Fund at the other, carrying on business in a manner incompatible with a private sector company. None of the public plans pay corporate income tax, and up until this year, one provincial Crown corporation, the I.C.B.C., did not pay any premium tax. It has been suggested that public plans do not pay market rates for services from the provincial civil service or may obtain the use of public buildings at less than competitive prices. In the minds of some, this suggestion, although not substantiated, has crystallized into a proven fact. I have not based my conclusions on the central issue of public automobile insurance on subsidization arguments of this nature.[7]

None of the matters referred to above make an evaluation of the overall performance of public and private delivery systems impossible, but they do make the exercise more difficult.

D. PREMIUM COMPARISONS

The case for publicly delivered automobile insurance is most frequently made by premium comparisons for different classes of drivers. The premium paid in Toronto by a 21-year-old single male who drives a 1984

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[7] Cross-subsidization within the plans is a different matter. See the discussion later in this chapter.

Honda Accord for pleasure, and work under 10 miles, and who has a five-year clear record is compared with the premium he would pay in Winnipeg, Regina or Vancouver. The premium paid in Ottawa by a 43-year-old married male with a 19-year-old son as an occasional driver is compared with the corresponding premium paid in Victoria.[8] The examples are endless. Selected comparisons can demonstrate significant disparities between the rates in Ontario cities and those in cities in the three western provinces with public plans. It is not surprising that such comparisons are made. When all is said and done, a chief concern of the Ontario driving public is to pay less for its automobile insurance premiums. If there are inherent advantages to a public delivery system that permit automobile insurance to be delivered at less cost than in the private sector, that would clearly be a very significant factor that would weigh in favour of a public system. However, the simplistic premium comparisons that have become popular are of no assistance whatsoever in assessing the comparative cost efficiency of public and private systems. Nor do they indicate what premiums Ontario drivers would pay if this province adopted public automobile insurance. In fact, these premium comparisons are misleading. The reasons are basically two-fold.

(a) Differences in Loss Costs (Pure Premiums)

To make any premium comparison meaningful all relevant characteristics must be held constant. These would certainly include the age and claims record of the insured and the model, age and use of the insured vehicle. But even if these characteristics were held constant and even if the classification systems in the provinces being compared were the same, premiums in each province would be different. An underlying reason is that territory is always a variable and territorial differences affect premiums. The impact of territorial differences not only helps to explain why premiums in Victoria are different from premiums in Ottawa and why premiums in Dauphin, Manitoba are different from those in Kenora; it also explains why premiums in Kenora are different from premiums in Toronto and perhaps more significantly why premiums in Victoria are different from those in Vancouver.

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[8] These are but two of the examples used by the NDP in its written submission to the Inquiry.

Territorial differences give rise to differences in accident frequency and accident severity. Accident frequency and severity are affected by factors such as geography and traffic density. Accident severity is also affected by provincial compensation laws. Differences in accident frequency and accident severity in different areas mean that average claims costs in those areas will also be different. Insurers quite legitimately look to their actual losses or claims costs to predict their future losses and thus to set their premiums. If average claims costs in Ontario are higher than, for example, in Saskatchewan, it is reasonable and to be expected that premiums in Ontario will also be higher.

Thus, any assessment of interprovincial premium levels must include an assessment of average claims costs in each of the provinces. The measure used by insurers to assess their actual losses or claims costs in any given territory is called the pure premium or the average loss cost per car insured. The pure premium is the total claims costs inclusive of adjustment costs divided by the number of insured vehicles. The pure premium provides an assessment of what has actually happened in a particular jurisdiction as measured by total loss costs per car insured. From that perspective, the pure premium calculation demonstrates what premium was actually required, albeit with the benefit of hindsight, just to pay losses and loss adjustment expenses. Operating expense, profit, if any, and investment income are not included in the calculation.

TABLE 15.1

PURE PREMIUM (Loss Costs)

	1986	1985	1984	1983
British Columbia	388.11	359.21	365.15	350.00
Saskatchewan	N/A	227.49	188.81	182.36
Manitoba	332.15	279.37	261.86	255.92
Ontario	443.32	414.31	361.95	315.36
Kenora Region	293.02	302.41	273.49	335.80
Toronto	560.04	511.35	448.44	388.62
Ontario Farmers	253.00	240.66	203.77	254.74
Canada Urban	431.17	396.84	344.97	310.25
Canada Rural	320.73	295.45	258.76	240.88

Table 15.1 shows the pure premiums in Ontario, the three western provinces with public plans and Canada (excluding the provinces with public plans) for the years 1983-1986. For Ontario, the pure premium in the Kenora region,[9] Toronto and for Ontario farmers is shown separately.[10]

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[9] The Kenora Region includes the cities of Kenora and Thunder Bay.

[10] Even these comparisons are not exact since basic coverage is in each province different to some extent; and in the case of Saskatchewan, indirect estimates had to be made due to the lack of reported data.

A number of important conclusions can be drawn from Table 15.1. They include the following:

(1) Territory, even within one province, may have a substantial effect on the pure premium. For example, the pure premium in Kenora between 1983 and 1986 was significantly less than the pure premium in Toronto, and for that matter for Ontario as a whole;

(2) the 1985 pure premium in Saskatchewan was approximately equivalent to the 1985 pure premium for Ontario farmers;

(3) the pure premiums in Ontario and British Columbia in 1984 were approximately the same. By 1986 the pure premium in British Columbia showed only a modest increase over the 1984 figure. By contrast, the 1986 pure premium in Ontario was substantially higher than it was in 1984 and accordingly is considerably higher than the 1986 British Columbia figure; and

(4) throughout the period 1983 to 1986, the pure premium in Toronto has been significantly higher than in any of the other regions being compared.

If the pure premium is higher in one province (or territory) than another, it should surprise no one that the premiums paid by motorists in that province (or territory) are also higher. It might be suggested that the reason the pure premium is lower in the western provinces is that public automobile insurance is more efficient than automobile insurance which is delivered by the private sector. The comparative cost efficiency of public and private automobile insurance which in my view is a crucial consideration will be analyzed later in this chapter. For the purpose of assessing the usefulness (or otherwise) of premium comparisons, I think it is sufficient to note there is little scope in the pure premium calculation for distortions on the grounds of efficiency. The only part of the pure premium calculation that might be affected by efficiency considerations is claims adjustment expenses and that item in Ontario only accounts for approximately 11% of the premium dollar. In general then, differences in loss costs will inevitably give rise to justifiable differences in premiums. These premiums differences are to be expected. They will continue to exist whether or not Ontario implements public automobile insurance.

It is unnecessary to examine microscopically the reasons why loss costs are higher in one territory than another. Factors such as geography, traffic density and the mix of high risk and low risk drivers all affect accident frequency and severity, and thus loss costs. Loss costs also reflect relevant provincial compensation laws. On this issue, I think it is fair to say that Ontario's compensation laws, particularly taking account of gross-up, family law claims and prejudgment interest, produce more generous tort awards than in British Columbia, Manitoba and Saskatchewan.[11]

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[11] Ontario is the only province of the four in which the principle of gross-up is recognized and applied on awards for future care costs in personal injury cases. Only Ontario and Manitoba recognize the statutory right to compensation on the part of dependents for the loss of guidance, care and companionship. (S.M. 1980, c. 5, S. 4(4). The Manitoba courts have expressed a desire to keep damages for loss of guidance, care and companionship at a modest level. See Laurence v. Good, [1985] 4 W.W.R. 652 (C.A.) which indicated that such an award should be around $10,000 and Larney v. Friesen, [1986] 4 W.W.R. 467 (C.A.).

(b) Cross-Subsidization in Premium Rating

Even if the classification system used by each province were the same, territorial differences and thus differences in loss costs make interprovincial premium comparisons a risky and difficult venture at best. The second and perhaps more serious problem with these premiums comparisons is that the classification systems are not the same. The classification systems used in the public plans involve extensive cross-subsidization. The existence of cross-subsidization fatally flaws any premium

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It should be noted that although British Columbia does not statutorily recognize a dependent's right to non-pecuniary damages for loss of guidance, care and companionship, the B.C. courts have allowed compensation for these losses in limited circumstances. See Jesselson v. Waters, [1981] 27 B.C.L.R. 191; and Sharp-Baker v. Fehr (1982), 39 B.C.L.R. 19.). Manitoba did not recognize prejudgment interest on tort awards until a statutory amendment in 1986. (Judgment Interest and Discount Act, S.M. 1986, c. 39. The statute provided for prejudgment interest on unsettled claims as of October 31, 1986. The M.P.I.C. established a $5.3 million liability for prejudgment interest on outstanding claims to October 31, 1986). Ontario has recognized prejudgment interest on tort awards since 1977. (See Chapter 10. British Columbia and Saskatchewan also have statutory provisions for prejudgment interest. See in British Columbia, the Court Order Interest Act, R.S.B.C., c. 76 as amended by S.B.C. 1982, c. 47; in Saskatchewan see The Pre-Judgment Interest Rate Act, S.S. 1984-1986, c. P- 22.2.) It would also appear that the Crown corporations in the western provinces are much less generous in the payment of party-and-party costs to successful claimants than are Ontario's automobile insurers. For example, I was told that the M.P.I.C. would likely pay between $1,500 to $2,000 for costs on a $50,000 claim. In Ontario, a claimant with a $50,000 claim might expect to receive between $6,000 and $7,500 in party-and-party costs.

comparisons between those provinces with public plans and Ontario.

When premiums are set in accordance with sound insurance principles, cross-subsidization does not occur. In principle, the premium charged for an insured's automobile insurance coverage should reflect the insurer's expected losses. This is generally the basis upon which premiums are set in the private sector. In a competitive environment, no insurance company can offer average prices to the public and stay in business. Professor Booth gives a simple illustration to demonstrate why this must be so.[12] Suppose for example, insurance company X decided that an average risk warranted an average premium of $300. Suppose insurance company Y could divide these risks more accurately into a high risk group that warranted a premium of $400 and a lower risk group that warranted a premium of $200. In this example, Y would be able to sell automobile insurance to the low risk group at $200, but not to the high risk group at $400, because the latter group would go to insurer X and get coverage at $300. Over time, the low risk group would go to Y and be charged a premium in accordance with its risk; the high risk group would go to X where it would be getting "cheap" insurance. Insurer Y would be financially sound since it is pricing its insurance fairly, relative to its expected loss costs; X would lose money since it would be setting premiums on the basis of an average risk when its insureds consisted only of high risks.

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[12] Inquiry Research Study II.

In a competitive industry, the subsidization of higher risks by charging more to lower risks cannot subsist. Premium pricing in the residual market (the Facility Association) represents an exception to this proposition. There is no competition in the residual market. Insurers pool losses and must provide insurance to those insureds who cannot obtain coverage elsewhere. In Ontario's Facility Association, premiums are set at levels lower than justified by expected loss costs.

Apart from the Facility Association (which represents a non-competitive market), in a competitive market, insurers seek to define risks as accurately as possible. This search for the effective classification of risks leads to a complex structure for risk-rating. The classification system and insurer underwriting practices will include a number of relevant variables.[13] The process of identifying and classifying risks is relatively costly, but it has beneficial consequences. One consequence is that an insured pays a premium which reasonably accurately reflects the insurer's expected loss costs on the policy. Another consequence is that insureds have an incentive to change their driving behaviour in order to become part of a lower risk group and thus pay a lower premium; for the very high risk drivers, the premium levels may actually preclude them from driving. Further, private insurers have an incentive to innovate, to seek new ways of classifying individual insureds more effectively or to find new rating variables. While it is an insurer's interest to refine its rating system, it works to the advantage of the consumer who by this refinement process secures the benefit of a lower premium.

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[13] For a detailed discussion of the classification system, see Chapter 6.

In contrast to a competitive environment, a public monopoly automobile insurer can operate with any rate structure it chooses without fear of providing a competitor with an advantage. All three public plans in western Canada use relatively simple rating structures which result in extensive cross-subsidization. This explains why none of the public plans can permit private sector competition. If the private sector was allowed to compete, then just as insurer Y in Booth's example, it would insure all of the good risks which are overpriced in the public system, leaving the latter with the under-priced bad risks. This point was recently made in blunt terms by the Minister in the Manitoba Government formerly responsible for the M.P.I.C.. During a visit to Toronto last summer, the Minister was reportedly asked "If you are so good at this why don't you become licensed in Ontario and service the Ontario market?" His answer was direct. He said, "Oh, we couldn't do that because we would end up with all the bad drivers".[14] The Minister is correct. If the M.P.I.C. were to move into Ontario and compete with the private sector one of two things would have to occur: the M.P.I.C. would either have to refine its classification system or lose all of its good business to the private sector.

As stated, cross-subsidization occurs with consistency in British Columbia, Saskatchewan and

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[14] TV Ontario transcript - Speaking Out - "Canada's Insurance Industry." (Incident reported by Roy Elms, president of The Royal Insurance Company).

Manitoba. Young drivers are the most obvious beneficiaries of cross-subsidization. Young drivers present in relative terms the same risk to the public insurance systems in British Columbia, Saskatchewan and Manitoba as they do to any other insurance system including that in Ontario. Nevertheless, the three public plans in their simplified classification systems have deliberately eliminated age as a rating variable and have not introduced a substitute.[15] This coupled with the fact there is no underwriting discretion exercised in the public plans means age is totally ignored as a rating variable. In practical terms, the result is that young drivers in British Columbia, Saskatchewan and Manitoba pay lower insurance premiums than is actuarially justified, as a matter of social policy, not insurance principles. This inevitably means other drivers in the system pay more than is justified by the application of sound insurance principles.

The I.C.B.C. Auto Plan which has a more complex classification system than either Saskatchewan or Manitoba now uses five rating variables--value and age of the car; the territory where the insured vehicle is principally operated;[16] the purpose for which the vehicle is used; the claims record of the owner; and a driver insurance premium based on the individual's driving record.

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[15] Ontario is about to eliminate age in its classification system, but it is essential to recognize it has introduced year licensed as a substitute.

[16] Attempts, as yet unsuccessful, have been made to legislate away this territorial distinction.

Before 1980, the I.C.B.C. also rated on the basis of age, sex and marital status. In 1979, the British Columbia Government made a decision to eliminate age, sex and marital status as rating variables; no substitute rating factors were put in their place. Instead, the I.C.B.C. introduced its FAIR programme, together with a Claims-Rated Scale. The FAIR programme operated on the basis that individual motorists regardless of age, sex or marital status should be treated as innocent (a safe driver) until proven guilty (an unsafe driver), a notion which defies sound insurance principles. The Claims-Rated Scale, a type of bonus-malus system is used to apply a discount or surcharge to the basic premium on the basis of the insured's driving record.[17]

The classification systems used by Saskatchewan's Auto Fund and Manitoba's Autopac are much simpler than that of the I.C.B.C. S.G.I. charges a standard premium for third party liability and no fault accident benefit coverage as well as a premium to cover all perils damage to the insured's car which varies in accordance with the value of the car. Surcharges are levied based on the individual's at-fault accident history and driving record over the previous three years.

The M.P.I.C. eliminated age, sex and marital status as rating factors in 1986. Premiums are based on the type and principal use of the car, with surcharges levied in accordance with a schedule of demerit points.

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[17] The scale gives a 10% discount each claim-free year up to a maximum of 4 years or 40% and a 30% surcharge for each claim.

It is obvious that in all three public plans high risk groups are being subsidized by low risk groups. Young drivers will certainly find automobile insurance far less expensive under all three public plans because of cross-subsidization. In Saskatchewan, because territory is ignored as a rating factor, rural drivers are subsidizing city drivers.[18] In Saskatchewan and Manitoba because of the very simple classification system employed by the S.G.I. and the M.P.I.C., cross-subsidization is extensive; even in British Columbia, it is considerable. Still, since there are relatively fewer of these high risk drivers, substantial premium decreases can be obtained for high risk groups with only moderate "excess" premium payments by the rest of the driver population.

Quebec should not be ignored in any discussion of cross-subsidization. All insured motorists in Quebec pay the same premium for compulsory coverage provided by the Régie. This results in massive cross-subsidization.[19]

For present purposes, I emphasize the existence of cross-subsidization in British Columbia, Saskatchewan and Manitoba only to illustrate how misleading it is to compare premium levels in the three western provinces and Ontario. If a young driver in British Columbia, for example, is paying an automobile insurance premium 50% less than is actuarially justified, is it reasonable to compare that insurance premium with the same young driver's premium in Ontario, where the young driver will be paying what his or her expected lost costs indicate should be paid? The answer to that question is obvious. For the purposes of an intelligent debate as to the desirability of introducing public automobile insurance, interprovincial premium comparisons are at best unhelpful and at worst, misleading.

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[18] This assumes that Saskatchewan rural drivers like rural drivers in Ontario are less of a risk than city drivers.

[19] Professor Gaudry has commented on this issue in analyzing the accident rate in Quebec. See Inquiry Research Study I.

There is a final observation to be made. In the past few months, all three public plans have announced substantial premium increases.[20] If nothing else, these increases render the premium comparisons submitted during the course of the Inquiry, non-current. These premium increases are an affirmation of a fundamental business principle; no insurance system can indefinitely pay out more than it brings in. In a public delivery system, if costs exceed revenues either premiums or taxes have to increase.

In my view, the relevant issue is not what a particular class of driver might pay in Toronto as compared to Regina or Victoria; rather, the relevant issues are:

(a) whether costs and thus premiums can be reduced by adopting public automobile insurance; and
(b) even if there are no cost efficiencies, whether there are social benefits favouring a public over a private delivery system.

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[20] Globe and Mail (November 21, 1987); Toronto Sun (January 3, 1988).

E. PUBLIC VERSUS PRIVATE DELIVERY-- SOME GENERAL CONSIDERATIONS

In one sense, the debate is over a question of political and social values. Whether to have a public or private delivery system reflects on the part of many, their philosophical belief as to whether or not the society in which they live will be better off by nationalizing an important service industry. In this context, although not determinative of the issue, I think it is fair to recognize that Ontario has had a long history of a free market economy. A philosophy of free enterprise continues to be accepted by a large proportion of the population of this province.

Whatever one's philosophical perspective, there are consequences of a decision to nationalize Ontario's automobile insurance industry which cannot be lost sight of in the debate. One obvious consequence is that there will be very significant financial and organizational implementation requirements. Measured by direct premiums written in 1986, the Ontario operations of one insurer, the Co-Operators, are larger than the entire M.P.I.C./Autopac, and yet the Co-Operators has less than 10% of the Ontario market. The four leading insurers in Ontario - Co-Operators, State Farm, Royal Insurance, and the Economical Group - which together have only about 27% of the Ontario market, wrote more automobile insurance business in Ontario in 1986 than the I.C.B.C.[21] I mention this simply to illustrate that the undertaking is a sizeable one. Implementation costs will be substantial.

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[21] See Inquiry Research Study II. See also Canadian Insurance, 1987 Annual Review of Statistics. M.P.I.C./Autopac gross premiums in 1986 were $223,209,000. Co-operators wrote $279,167,000 in direct premiums in Ontario in 1986. The I.C.B.C. net premium earned figure

The impact of government ownership on the lives and jobs of all those employed in the automobile insurance industry--company employees, brokers, agents and adjusters--must be taken into consideration. Undoubtedly, a provincial Crown corporation would employ or use the services of a substantial number of those now working in the private sector. Yet some employees would lose their jobs; others to retain theirs would have to face the prospect of relocating themselves and their families, because it is likely that the establishment of a Crown corporation will result in a more centralized insurance operation than now exists. If efficiency gains are looked to as a justification for public automobile insurance it seems to me the operation would have to be centralized, probably in Toronto.

Nor can one ignore the potential impact of Ontario government ownership of Ontario's automobile insurance industry on the Canadian automobile insurance industry and on the general insurance industry in this province.

Ontario is clearly the dominant automobile insurance market in Canada. Automobile insurance in this province accounts for an estimated 50% of the total Canadian automobile insurance business of private insurers. Excluding the private sector from all or virtually all of

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in 1986 was $757,754,000. The leading four insurers in Ontario together wrote $844,658,000 in direct premiums in 1986.

the Ontario market[22] may limit industry involvement in the remainder of the Canadian market.

Automobile insurance also accounts for nearly half of the total general (other than life) insurance business in Ontario. If the delivery of automobile insurance was made public, then it is quite possible that general insurance companies which will rely on automobile insurance for a significant share of their business could withdraw from the Ontario market altogether. Such withdrawals would not only have adverse employment effects, but might well create a shortfall of capacity in general insurance lines. The potential of this withdrawal is, I concede, somewhat speculative.

A government-run insurance corporation is the most drastic response to a call for greater government intervention in the automobile insurance industry. If the performance of the private delivery system is ineffective or inefficient to a degree that demands government involvement, then other measures falling short of nationalizing the industry must also be considered. Rate regulation in the form of the establishment of a rate review agency or even a rate setting agency is one alternative.

I raise all of these concerns because, in my opinion, they are important and ought not to be ignored. In and of themselves, they should not preclude the adoption of a public plan if the merits of government ownership can be clearly demonstrated. However, these concerns suggest to me that before Ontario completely abandons its present private sector competitive structure, there ought to be a clear and convincing case in favour of public automobile insurance.

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[22] The private sector may be allowed to compete on optional coverage as in the public plan.

F. PUBLIC VERSUS PRIVATE DELIVERY-- ADVANTAGES AND DISADVANTAGES

The adoption of a public plan would involve two changes from the present delivery system in Ontario. There would be a change in ownership from a private corporation to a provincial Crown corporation and there would also be a change in market structure from a competitive environment to a monopoly.

In theory, it would be possible to permit private sector insurers to compete head-on with the Crown corporation in the delivery of automobile insurance. This could but will not happen, judging from the experience of provinces with public plans, and having regard to the inevitable consequences of competition between a public plan and the private sector. If a public plan were to adopt the simplified rating practices characteristic of the I.C.B.C., the M.P.I.C. and the S.G.I., as earlier stated, the private sector would secure the business of all overpriced risks and cede the high risk business by default to the competing public plan. In the end result, the public plan would be insuring average and below average risks at average premiums; the private sector would be insuring better than average risks at average premiums. The private sector would thrive; the public plan would eventually wither.

It is not a coincidence that the legislation establishing the public plans in Quebec, Manitoba, Saskatchewan and British Columbia precludes private sector competition. There may be a number of reasons for this; clearly one reason, however, is that the public monopoly insurers could not withstand private sector competition. If the public plan were to refine its rating practices to avoid the inevitable loss of low risk business to the private sector, true competition would exist. The public plan, however, could no longer claim the public relations benefit of presuming certain risks were good risks until an event (e.g., an accident or a conviction) proved otherwise.

I consider the two basic choices to be retention of the present competitive private sector delivery system on the one hand and the establishment of a public monopoly on the other. If the choice is to retain the present system, then lesser forms of government intervention--rate review or rate setting--must also be considered.

(a) Cost Efficiency

Of all the considerations that might be brought to bear on the debate over public and private automobile insurance, in my opinion the critical consideration is cost efficiency. To put it another way, absent demonstrable efficiency gains, the case for public automobile insurance is severely compromised.

The public's interest in this issue is premium-related. Can automobile insurance be delivered at less cost by the government than by the private sector? Will public automobile insurance lead to lower premiums for the consumer? These are the dominant questions to be answered. Answers to these questions cannot be found by comparing premiums in Ontario with premiums in jurisdictions having public plans.

An assessment of cost efficiency requires consideration of economies of scale, the probability of claims or operating expense reduction and the benefit, if any, to be derived from the elimination of private sector profits. In making this assessment I have taken account of available data from all three public plans. I regard the I.C.B.C. experience to be the most relevant for assessing the probable consequences of government ownership of automobile insurance in Ontario. While I have not ignored the M.P.I.C. or the S.G.I., the size of the I.C.B.C. and the greater statistical disclosure provided by it make the British Columbia experience more useful.

(i) Economies of Scale

The advantage of size is what economists refer to as economies of scale. The Halpern study gave careful consideration to this issue and concluded that there are no significant economies of scale in the writing of automobile insurance.[23] I agree with that conclusion but subject to certain qualifications. In making a theoretical comparison between major Ontario insurers and an Ontario public automobile insurance corporation, there will be no efficiency gains attributable to economies of scale (size). It is obvious that some of the smaller insurers in the Ontario market are too small (in the economic sense) and accordingly cannot realize those efficiency gains which result from economies of scale.

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[23] See Inquiry Research Study II.

(ii) Expense Efficiency

Table 15.2 provides an expense breakdown for the three public plans for the period 1982-86 and for Ontario for the period 1982-85. The expense ratios reflect both the fixed and variable costs of writing automobile insurance. They include claims adjusting expenses (fees paid to adjusters, lawyers, etc.), commissions paid to brokers and agents, and other operating expenses. As Halpern notes, in identifying expense ratios for automobile insurance alone there is difficulty in allocating common costs for private sector insurers or public plans that engage in other lines of insurance. Allocations may sometimes be arbitrary. Halpern gives as an example the administration (operating) expense ratio in Saskatchewan which dropped 4.7% from 1982 to 1983 while the opposite movement occurred in that element of the expense ratio in Saskatchewan's general insurance operations.

Another difficulty in looking at expense ratios is that the ratio takes both expenses and premiums into account. The expense ratio can be improved (lowered) by reducing expenses and by increasing premiums or both. Halpern suggests that over the period being considered in Table 15.2, Saskatchewan premiums were too high with the result that Saskatchewan expenses as a percentage of

TABLE 15.2

EXPENSES AS A PERCENTAGE OF EARNED PREMIUM: AUTOMOBILE

	1986	1985	1984	1983	1982	Average 1982-1986
ICBC[24]						
Claims Adjusting	9.3	8.7	8.8	9.1	9.5	9.1
Administration	7.8	7.8	8.8	8.8	8.4	8.3
Commission	7.5	6.8	6.7	5.9	6.2	6.6
TOTALS	24.6	23.3	24.3	23.8	24.1	24.0
MPIC						
Claims Adjusting	11.8	10.8	10.5	10.3	9.9	10.7
Administration	4.3	3.6	4.2	4.9	4.4	4.3
Commission	4.7	4.7	4.5	4.8	4.9	4.7
Premium Taxes	3.0	3.0	3.0	3.0	2.7	3.0
TOTALS	23.8	22.1	22.4	23.0	21.9	22.7
SGI						
Claims Adjusting	8.5	8.5	8.5	8.5	8.5	8.5
Administration	7.6	9.8	6.2	6.3	11.0	8.2
Commission	0.9	1.2	0.8	0.9	0.8	0.9
Premium Taxes	4.0	4.0	4.0	3.3	3.0	3.7
TOTALS	21.0	23.5	19.5	19.0	23.3	21.3
ONTARIO[25]						
Claims Adjusting	11.0	11.0	11.0	11.0	11.0	11.0
Administration	7.0	9.4	11.1	10.9	10.5	9.8
Commission	11.4	11.5	11.3	10.8	10.4	11.1
Premium Taxes and Licence Fees	3.4	3.4	3.4	3.4	3.4	3.4
TOTALS	32.8	35.5	36.8	36.1	35.3	35.3

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[24] The I.C.B.C. did not pay premium taxes in the years being compared. It now does pay this tax.

[25] The Ontario claims adjusting expense ratio has been estimated at 11.0%. While not precise, this figure is generally thought to be reasonably accurate.

earned premiums were low.[26] Although I view resort to comparing expense ratios as a precarious exercise it does serve to illustrate the expense-related differences between the public plans and Ontario. Subject to the general concerns expressed above, these conclusions may be taken from Table 15.2:

(1) Commission costs in Ontario are substantially higher than commission costs in the public plans. The Ontario average figure of 11.1% is considerably above the averages for the I.C.B.C. of 6.6%, the M.P.I.C. of 4.3% and S.G.I. of 0.9%;

(2) The claims adjusting ratio in the public plans varies between 8.5% and 11.8%. The Ontario claims adjusting ratio of 11.0% is within that range. The average claims adjusting ratio for each of the public plans is slightly below that of Ontario. Halpern observes that the differences could be accounted for by the 1.3% allocation of corporate overhead included in the Ontario figure; and

(3) Ontario insurers' administration (or operating) expenses of 9.8% are clearly higher than the averages for the I.C.B.C. of 8.3%, the M.P.I.C. of 4.3% and S.G.I. of 8.2%. This item includes all expenses other than claims adjustment

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[26] See Inquiry Research Study II. Another illustration can be seen in the administration or other operating expense ratio for Ontario for 1985/86. The decline in that ratio from 11.1 in 1984 to 9.4 in 1985 and to 7.4 in 1986 is no doubt largely, if not wholly, attributable to the 1985/86 premium increases. To have any real validity, expense ratios should be considered over a five-year period.

expenses and commission (a part of operating expenses dealt with separately in Table 15.2). Part of the differential must be attributable to lower underwriting costs in the western provinces. For example, the public plans do not make a direct payment for motor vehicle record searches. Ontario insurers pay a $5 fee per search.

There appear to be two main reasons for the difference in total expense ratios between Ontario and the public plans: commissions and other operating expenses. There is no cost savings in claims adjusting expense of any real consequence, particularly if the arbitrary Ontario head office allocation is taken into account. Even without that adjustment, claims adjusting expense differentials are relatively small.

Commission costs or business acquisition costs in the public plans are lower than in Ontario. There is no uncertainty about this. The commission structure for broker companies in Ontario is a cost of competition. Whether it is a reasonable cost is something that need not be debated here. Brokers provide the link between consumers and insurers. Insurers have to provide a commission-based incentive to secure business through a broker. An insurer paying a lower rate of commission will inevitably see its market share decline. Direct writers are exposed to lower direct business acquisition costs than insurers who rely upon independent brokers. But direct writers are exposed to indirect business acquisition costs in that they must establish a corporate identity or market recognition. Thus, all private sector insurers face business acquisition costs that are not duplicated in public monopoly plans. This is not a public-private issue, but rather, a product of monopoly as opposed to competitive delivery.

It can be said that brokers and agents perform services for their clients that are unnecessary in a public monopoly. These services include providing information on the coverages offered by different insurers and shopping the market for better rates. Some, including Halpern, suggest that higher commissions are paid in Ontario than in the public plans because Ontario brokers perform these additional services for their clients. I tend to disagree with this way of looking at the matter. The real reason for the existing commission structure, is as I have said, that insurers have to provide an incentive to obtain business.

Once broker commissions are separated from operating expenses as they have been in Table 15.2, conclusions about differences in other operating expenses must remain somewhat uncertain and guarded for the following reasons:

(a) Operating expense (less commissions) expressed as a percentage of earned premiums is susceptible to distortion because of changes on the premium side. Unlike commissions which directly vary with premiums, a large part of operating expense is fixed;

(b) For those automobile insurers also engaged in non-automobile lines of insurance (this includes the M.P.I.C., the S.G.I. and most of Ontario's private insurers) allocation of operating expense, even if done with the best of intentions, may be somewhat arbitrary. It has

> been suggested by some that fixed operating expenses are vulnerable to manipulation. The potential for manipulation exists in both public and private sector operations; the real potential for manipulation is significantly less in the private sector because of the number of insurers that would be required to participate to effect a significant data change. I have no evidence of manipulation of operating expense and, therefore, decline to base any conclusions on the mere prospect of it having occurred.

One plausible explanation for at least part of the difference in operating expense is that the public plans use a simple classification system and perform no underwriting functions. Private Ontario insurers, in order to compete effectively, are required to engage in more complicated risk rating. This is an additional cost to the Ontario delivery system. I have no evidence to indicate what that additional cost might be. Intuitively, I expect it is not overly significant. Whatever it may be, once again, this is not a public-private issue. The costs savings to the public plans resulting from the use of simpler rating structures is directly attributable to the fact these plans are monopolies.

Whether one calls them efficiency gains or not, it is undeniable that public monopoly automobile insurance can achieve cost savings when compared to a competitive automobile insurance industry in the private sector. The most important cost savings is lower business acquisition costs (mainly broker commissions); a less significant cost savings is in other operating expense. These cost advantages depend not on the difference between public and private delivery, but on the difference between monopoly and competitive delivery.

Apart from the monopoly-related cost savings just discussed, I do not think it can realistically be asserted that public plans have found some particular method to write automobile insurance in a more "efficient" way than private insurers. This observation is reinforced by an examination of the performance of the public plans in non-automobile insurance where they must compete with the private sector. Both the M.P.I.C. and the S.G.I. compete with private insurers for general insurance business; the I.C.B.C. also competed until it sold its general insurance division in 1985.

Table 15.3 shows the expense ratios for the M.P.I.C., the S.G.I. and the I.C.B.C. in their general insurance operations for the 1982-86 period. The general insurance expense ratios are dramatically different from the corresponding automobile expense ratios. The M.P.I.C., for example, has a total expense ratio in its general insurance division in each year considered which is double the automobile total expense ratio in 1986 and more than double in every other year.

What is perhaps more instructive is that the apparent strength of the public automobile insurance plans in having low administration and commission expense ratios disappears in their general insurance operations. It is obvious that the commission expense is higher because the public plan has to compete for business in its general insurance division. Booth also notes that the

TABLE 15.3

EXPENSES AS A PERCENTAGE OF EARNED PREMIUM: GENERAL INSURANCE

	1986	1985	1984	1983	1982
MPIC					
Claims Adjusting Ratio	5.0	5.9	4.1	4.1	4.3
Administration Ratio	18.0	19.8	15.5	14.8	16.3
Commissions	18.3	19.7	20.7	24.9	24.9
Premium Taxes	4.6	4.7	3.1	2.9	2.2
TOTAL	45.9	50.1	43.4	46.7	47.7
SGI					
Claims Adjusting*	N/A	N/A	N/A	N/A	N/A
Administration Ratio	N/A	15.9	16.9	17.7	11.0
Commissions	N/A	19.4	19.1	18.7	19.0
Premium Taxes	N/A	4.3	4.6	3.9	3.3
TOTAL		39.6	40.6	40.3	34.1
ICBC					
Claims Adjusting*			N/A	N/A	N/A
Administration			19.0	19.8	21.0
Commissions			22.5	21.7	18.9
Premium Taxes			3.2	3.2	3.2
TOTAL			44.7	44.7	43.1

*Not broken out with claims costs.

non-automobile expense ratios of the public plans compare unfavourably with the non-automobile expense ratios for the private sector. I do not think it is fair to draw any efficiency conclusions concerning the general insurance operations of the public plans. But I think it is fair to conclude that these public monopolies have not discovered any method of controlling expenses which if imported to Ontario would allow them to out-compete private insurers. In other words there is nothing to suggest that any of the public plans have unearthed any operational secrets which would permit them, if faced with private sector competition, to prosper and thus offer lower premiums to the consumer.

Although a public plan in Ontario could not lay claim to cost efficiencies if faced with competition, it is nevertheless clear that public automobile insurance, at least in the short term, if given a monopoly position would be exposed to lower costs than the private sector insurers. In making this statement I am ignoring the start-up costs of a public plan, which in Ontario would be enormous. If a public automobile insurance plan is introduced in Ontario and is given a monopoly position, it is reasonable to proceed on the assumption that the cost savings will approximate those in British Columbia.

As previously indicated, the principal source of these cost savings is commissions. For the purpose of analysis, if the commissions in Ontario were reduced to British Columbia levels, savings in the range of 4-5% would result. If this was the only area of savings and if the resulting cost reductions were translated directly into premium reductions, then premiums for Ontario motorists would be reduced by approximately $30 per car.[27]

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[27] This estimate was made by Joe Cheng, the actuary retained by the Inquiry, using I.B.C data. Cheng used an Ontario average weighted premium of $500 and an expense ratio (exclusive of claims adjusting expense) of 25%. The figure of $30 is within the range calculated by Booth (See Inquiry Research Study II). It should be made clear that

There may be other potential areas of savings but they are small. One, however, is visible. That is the cost savings that would result if the monopoly insurer were to use a simplified classification system and were to virtually eliminate underwriting-related expenses. It is impossible to proffer anything other than a speculative estimate of these cost savings. Again, looking to British Columbia, it appears to me that at most, there could be additional cost savings of 3%.[28]

As I see it, even based upon a costless conversion to public delivery, the maximum premium reduction that could be achieved by the monopoly insurer would be approximately $43 per car.[29] Part of this cost and premium reduction is only achieved by abandoning Ontario's relatively complex system for classifying and underwriting risks. It should not be forgotten that the beneficiaries of that system are low risk drivers. The beneficiaries of the conversion to an I.C.B.C. classification system will be high risk drivers. Because of the change in the classification

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this calculation does not indicate who is going to benefit from the premium reduction. The impact of the cost savings on premiums in a public plan is an entirely separate issue considered later.

[28] Table 15.2 indicates a difference in average expense ratios between British Columbia and Ontario of about 8% of which 4-5% is accounted for by commissions. Premium taxes (now paid by the I.C.B.C.) and licence fees have been held constant. Booth's results are roughly similar, save that Booth places more emphasis on the savings from using a simple classification system than I do. This goes, however, to the source of the savings, not its quantum.

[29] Cheng estimated that a 7% expense saving translated into an average premium reduction of $43 per car.

system, the impact of the aggregate cost savings will affect different insureds totally differently. Young (or inexperienced) drivers, for example, will enjoy massive premium reductions. According to Booth's study with which I generally agree on this point, approximately 43% of Ontario's drivers who are now classified as low risk drivers will face premium increases of about $55.

These cost calculations have been derived by comparing the actual British Columbia and Ontario experience, an approach which is designed to estimate the maximum potential cost savings achievable by conversion to a public monopoly. The exercise undertaken thus far is helpful as a starting point. In order to provide a realistic assessment of the probable cost consequences of conversion to public monopoly automobile insurance it is essential to take account of a number of considerations thus far ignored. All go to reduce, if not eliminate entirely, the potential for cost saving. They include:

(1) Start-up costs of a public insurance corporation must be set off against any gross cost saving estimate. This has to be a massive undertaking which inevitably would dwarf even the I.C.B.C. in size. An Ontario public insurance corporation would write more than ten times as much business as Ontario's largest private insurer. This is not the case of renting three floors in an office building in Mississauga. Even if existing facilities are used, office space will represent a cost to the system. So will personnel, and claims and administrative offices that must be established throughout the province. Although the Ontario operation will

be substantially larger than that of the I.C.B.C. one cannot help recalling the transfer to the I.C.B.C. of $175 million in 1977.[30] I mention this transfer (which in current dollars would likely be doubled in amount) not because it has not been paid back, but because it had to be paid in the first place. I received no evidence as to what the reasonable start-up costs might be, but no one could seriously dispute the suggestion that start-up costs for a public automobile insurance corporation in Ontario would be enormous. Whatever the start-up costs are, they will be reflected in increased automobile insurance premiums or increased taxes or both.

(2) Monopoly delivery by definition forecloses access to the benefits of competitive pricing. The same incentive to keep premiums low does not exist. The impact of this factor is unquantifiable.

(3) If the public monopoly adopts a simple classification system as has been done in all public plans in Canada (to varying degrees) demonstrably high risk drivers will pay substantially lower premiums than otherwise would be the case. When this happens, as the Quebec experience indicates and Professor Gaudry's study confirms, there will be more high risk drivers on the road and there will

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[30] Insurance Corporation of British Columbia, Comparative Aspects of the Insurance Corporation of British Columbia and Private Sector Insurance Companies in Canada (Vancouver: The Corporation, 1985), p. 8.

> inevitably be an increase in accident frequency and severity. Increased claims costs will result which will reduce, if not eliminate, the theoretical cost decreases in operating expense discussed earlier.

(iii) The Profit Argument

Many who support public automobile insurance suggest that private insurers are making substantial profits which would be eliminated under a public monopoly with the result that consumers would benefit by having lower premiums. The argument is that any profits made by Ontario automobile insurers would be transferred to Ontario motorists. That argument is fundamentally flawed. Without the ability to make a profit, private insurers would not be in business. If they went out of business, the public would be denied the benefit of lower premiums which results from competition.

Some critics of Ontario's private insurers are fond of quoting the alleged profits made by the insurance industry as some evidence that the Ontario driving public would be better off with public insurance. I hold no brief for the insurance industry and as other parts of this Report have indicated, there is much about the private sector delivery system to be criticized. But statements such as "the insurance industry made $2 billion last year" add nothing to the debate. Such statements ignore the fact that there are different lines of insurance and some may be profitable while others are not, ignore the number of individual insurers, ignore provincial boundaries and most importantly ignore the fact that companies in a competitive industry are entitled to make a profit. Automobile insurance should be looked at on its own. If there are excess profits in other lines of insurance, that is an issue which should be separately considered.

On the profit issue, in my view, the only relevant question is whether Ontario's insurers are making monopolistic or oligopolistic profits from their automobile insurance operations. The available evidence strongly suggests, at least in the last several years, that there are no "excess" profits in this business.

The analysis of premium levels and loss costs which is contained in Chapter 7 makes it abundantly clear that the premiums charged to Ontario motorists are consistent with competitive prices and with expected loss costs. This conclusion was also reached by Professor Halpern in his study for the Inquiry. Further, there is no evidence at all of cartel-like or collusive behaviour amongst Ontario insurers which would give rise to excess profits.

While economists suggest that in a competitive industry such as the automobile insurance industry there can be no excess profits, the potential for excess profits is a matter better addressed by rate regulation than by nationalization.

Finally, if contrary to the view I have expressed above, there is any validity to the profit argument, it seems to me that this argument could be used to justify nationalizing any industry that is making a profit. There is nothing peculiar about the automobile insurance industry that makes it particularly vulnerable to the transfer of profit to the consumer argument.

(b) Social Benefits and Other Considerations

(i) Choice and Competition

In the public plans there is, of course, only one supplier of automobile insurance, the monopoly Crown corporation. If a consumer, for whatever reason, is unhappy with the public monopoly, the consumer cannot turn to another supplier of automobile insurance. The choice is simple: deal with the public monopoly or do not drive.

This is not the case in the competitive environment in which private insurers operate. An insured, unhappy with the service or the rates quoted by one insurer has the choice of other insurers with whom he can do business.

Freedom of choice and the benefits of competition are hallmarks of a private enterprise system. I do not regard the matter so much in ideological terms as in practical terms. It seems to me that the freedom to choose from among a large number of competitive insurers is an undeniable advantage to those who are required by law to purchase automobile insurance in order to drive.

(ii) Fairness in Premiums

It is argued by some that the setting of premiums on the basis of an individual's actual driving record rather than his expected risk is fairer and more equitable. The innocent until proven guilty theory of premium setting dominates the public plans. This leads to extensive subsidization of high risk drivers by low risk drivers.

The issue here is whether premium rating will or will not be based on insurance principles.

If such extensive and institutionalized cross-subsidization is seen as a socially desirable policy then it perhaps argues for public delivery. For reasons elaborated upon earlier, such extensive institutional cross-subsidization will not subsist in a truly competitive industry.

I see nothing fair or equitable about a system which generally requires low risk drivers to subsidize high risk drivers. I see nothing unfair or inequitable in requiring any driver, young or old, male or female, married or unmarried, to pay a premium which reflects his real risk to the system as assessed on the basis of sound insurance principles. I acknowledge that a case can be made on social policy grounds for some cross-subsidization of certain groups of drivers. Taxis are an example. If all taxi drivers were required to pay premiums that reflected their expected loss costs, many could not afford to be in business. Modest cross-subsidization can in that event achieve a useful social purpose. It can, however, be effected by the private sector through the Facility Association. In other words, through the use of the residual market; cross-subsidization and private competition can co-exist.

In a competitive private sector market, modest cross-subsidization through the residual market should be viewed as the exception rather than the rule. If cross-subsidization exists in the Facility Association the winners are obviously those drivers who will pay less than actuarially sound premiums. What must not be forgotten is that the losers are the rest of Ontario's motorists who will be called upon to pay increased premiums. To the extent that the population of the Facility Association expands, the benefits the rest of Ontario's motorists derive from competition, contract. If real competition is to continue it will be necessary to monitor and control the number of insureds in the residual market.

The issue of cross-subsidization should not be confused with the issue of whether age, sex and marital status should be abolished as rating variables. There may be social or constitutional reasons which dictate that insurance premiums not be based on these variables. Their elimination will not lead to any significant degree of cross-subsidization provided they are replaced with reasonably accurate substitutes. One of the main reasons there is extensive cross-subsidization in the public plans is that there are no substitutes in place for age and sex, only surcharges (or discounts) levied after the fact. In addition to the fairness issue, as Halpern notes, cross-subsidization provides a perverse incentive in allowing some high risk drivers on the road who might not otherwise be able to afford insurance. In my opinion, the simplistic classification systems used by the public plans are inequitable. I regard these rating practices as a significant disadvantage of public delivery systems.

(iii) Availability and Affordability

Automobile insurance is compulsory for those who wish to drive. In the public delivery systems, the provincial Crown corporation is obligated to sell insurance to all those who are required to buy it. There is no necessity for a residual market mechanism. Questions of availability do not arise. In Ontario's competitive industry, no single insurer is required to sell insurance to any particular consumer. In order to ensure the availability of insurance to those required by law to buy it, a residual market is necessary. In Ontario, the residual market is served by the Facility Association. The public delivery system directly and the private delivery system through the Facility Association both guarantee the availability of insurance coverage.

Affordability is another matter. To a large extent it is related to the question of the fairness of insurance rates. The problem is to determine what is meant by fairness. As I indicated in Chapter 12, I approach this matter rather cautiously, going no farther than to indicate that automobile insurance should be made available at a price consistent with proper insurance principles. From this perspective, it would be inappropriate to suggest that a public plan had any advantage over the present private delivery system in Ontario. In any insurance plan, public or private, premiums and investment income have to be sufficient to pay claims and other expenses. There is no magic in public delivery which dilutes this fundamental business principle.

(iv) Compliance

In public plans, the government is responsible not only for the issuance of driver permits and vehicle registrations but also for the issuance, renewal and withdrawal of insurance coverage. In the three western provinces, these systems are integrated. A car owner cannot obtain his licence plates or renewal sticker without the simultaneous purchase of automobile insurance. This integration provides an effective means of ensuring compliance with and enforcement of provincial compulsory insurance legislation. Some will drive without any insurance in any plan; in the public plans the uninsured driver problem seems to be minimal.

With a private sector delivery system, it may be marginally more difficult to link insurance and licensing requirements, although, I hasten to add, in the computer age one would not have thought it necessary to have a public delivery system to achieve this link up. In principle, vehicle registration cannot be issued or renewed in Ontario without proof of insurance. In practice, information submitted on insurance coverage at the time of registration is not routinely or efficiently checked. In any event, there is no centralized information retrieval system which would allow the licensing authority to confirm the existence of valid coverage. This deficiency ought to be recognized and corrected.

I think it must be conceded that the public plans have done a better job in integrating licensing and insurance requirements than have the Ontario Government and private insurers. But is should also be recognized that the gains to be achieved by such integration are very modest, bearing in mind the fact that current estimates suggest less than 2% of Ontario's drivers are uninsured.[31]

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[31] Care has to be taken in assessing data relating to breaches of the Compulsory Automobile Insurance Act. I regard uninsured motorists as motorists who have no automobile insurance coverage. I do not include drivers who cannot produce the required liability insurance

The integration of licensing and insurance requirements has a dimension to it which goes beyond the issue of compliance. Such integration allows the public plans to give surcharges or discounts to individual drivers based on their driving experience. Driver-based surcharges and discounts promote deterrence and may well be justified in principle on that ground alone. They are not, however, a substitute for a sound classification system. They do lessen, albeit after the fact, the extent of cross-subsidization in the public plans. Furthermore, they likely result in an owner whose vehicle is driven by a high risk occasional driver, paying a lower premium than would otherwise be the case. I consider this capacity to assess the individual drivers to be one of the distinct advantages of public automobile insurance.

(v) Traffic Safety and Accident Prevention

In a public delivery system, the government or Crown corporation should have a strong financial interest in accident prevention. The more accidents that can be prevented the less that is required to be paid out in claims; the less paid out in claims, the less the drain on government expenditures and the more premiums can be reduced. All of this makes good economic and political sense.

Private sector insurers are not naturally in the business of accident prevention and they are unlikely to

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certificate but who are, in fact, insured.

have the same vested interest in promoting traffic safety as a government-run automobile insurer.

Administration of a comprehensive traffic safety program can likely be undertaken more easily and at less cost in the public sector. The province already has various administrative systems in place which affect the driving public. These include driver's licences, vehicle registration and demerit point systems, and O.H.I.P. and related health delivery files. Coordination and centralization of the information flow and administrative requirements for a traffic safety program can be effectively integrated into the existing public sector systems. Gerald Wilde, Professor of Psychology at Queen's University, has written extensively on the topics of accident prevention and the use of incentives for safe driving. In his research study for the Inquiry, Professor Wilde concluded that

> With respect to most criteria, the opportunities for effective safety programming would seem to be greater under public than under private control over automobile insurance.

Among the public plans in Canada, the I.C.B.C. has been particularly active in the area of accident prevention. The I.C.B.C. spends approximately $4 million per year on its traffic safety activities which include both research and planning and the development of educational programs. Several of the programs developed by the I.C.B.C. have been used throughout North America. The I.C.B.C. commitment to accident prevention is clear and commendable. I have not, however, attempted to evaluate the success of the I.C.B.C.'s accident prevention program nor am I aware of any independent evaluation of it. If one were to assume the I.C.B.C. traffic safety programs have succeeded in reducing accident frequency and severity (a not unreasonable assumption), given British Columbia's increasing bodily injury accident frequency rate, it is unnerving to contemplate what the situation would be without the I.C.B.C. commitment of resources to traffic safety.

I am in agreement that the interest in and opportunities for the promotion of traffic safety are likely to be greater in a public than a private delivery system. Yet the government's interest in traffic safety and its commitment to accident prevention should not depend upon whether it is responsible for the automobile insurance system. Motor vehicle accidents are a serious social problem. They impose a huge human and economic cost on society. Any responsible government should be committed to taking effective measures to reduce motor vehicle accidents whether or not it is in charge of the automobile insurance system.

(vi) Impact on Repair Costs

The Woods, Gordon Report prepared for the 1978 Select Committee on Company Law suggested that one advantage of a public delivery system would be its ability to lower repair costs due to its monopoly power over auto body shops and its research capability into new methods of repair.

The evidence does not appear to bear this out. I dealt with the costs of repairs in Chapter 7. 1986 data show that the cost of labour, shop and paint material in Ontario is substantially lower than in British Columbia, Manitoba and Saskatchewan. A possible and quite plausible explanation is that body shops in Ontario compete for the business of competing insurers. That seems to have resulted in lower body shop wage rates in Ontario.[32]

(vii) Other Matters

Public plans pay no corporate income tax. Defenders of public insurance refer to the non-payment of corporate income tax as a matter which is "purely academic"[33] because the government plans operate on a break-even basis. This argument completely misses the point. As the Woods, Gordon Report states, in summarizing the disadvantages of public insurance, "loss of corporate tax revenues may need to be balanced through higher taxes in other areas."[34]

Another argument advanced in favour of public insurance, in my view with distressing frequency, is that public insurers concentrate their investments within the province. This argument is flawed. Public insurers no less than private insurers owe a duty to their policyholders to make the most efficient use of capital. The I.C.B.C. seems to do just that. Over 70% of I.C.B.C.

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[32] Halpern's study notes that private insurers get volume discounts from repair shops, a practice thought inappropriate for a Crown corporation.

[33] See Insurance Corporation of British Columbia, Comparative Aspects.

[34] Woods, Gordon & Co., Government Ownership of Automobile Insurance. A Report...for the Select Committee on Company Law (1978), p. 88.

investments appear to be out-of-province.[35] Moreover, at a time when jurisdictional barriers to capital markets are being lowered, if not eliminated, it seems hard to justify an insurance company policy that would result in increased premiums because of decreased investment returns.

Another argument put forward in favour of public automobile insurance is that it provides more convenient service for consumers. I have no evidence to suggest that the consumers in the public plans are more or less satisfied than consumers in Ontario. I did not make any inquiries as to the level of consumer satisfaction in the public plans. I am prepared to assume their customers are satisfied. Judging by the submission received by this Inquiry and an analysis of the complaints lodged with the Superintendent of Insurance, vehicle damage service complaints seem to be among the least of Ontario consumer concerns.

There is one further matter that deserves brief comment. Defenders of private sector automobile insurance submit that because public plans do not require the equity cushion that regulators in private sector delivery systems demand, public plans are the beneficiaries of an indirect subsidy. I do not think this argument has merit. The "missing" equity cushion in the public plans is used elsewhere.

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[35] I.C.B.C., Annual Statement, 1986, p. 17.

(c) Woods, Gordon & Co. Report

In its 1977 Report, the Select Committee on Company Law indicated it would

> ...seek to determine in detail the elements of public ownership of the automobile insurance business and how they vary from private ownership with a view to making recommendations on this issue.[36]

The Committee commissioned Woods, Gordon & Co. to prepare a report on public automobile insurance. The Woods, Gordon Report, Government Ownership of Automobile Insurance, was delivered in January 1978. As many who argue in favour of a public automobile insurance plan for Ontario rely upon this Report, I thought it important to examine the Report's findings.

In my view, the Woods, Gordon Report provides a comprehensive and reasonably balanced assessment of the issue. The Report stops short of making a recommendation that Ontario implement government automobile insurance.[37] The Report identified a number of advantages and disadvantages attendant upon establishing public automobile insurance.

Many of the matters which I have considered relevant to an assessment of the issue were also considered by Woods, Gordon. I think it fair to say that our conclusions are generally consistent in principle. The Woods, Gordon Report identified the potential for cost savings on converting to a public plan. It put the matter on the basis that government insurance is capable of returning a higher percentage of its total revenues to claimants in the form of benefits. The Report attributed these cost savings to two factors; first, because of its monopolistic nature, the government insurer need not incur those costs expended by a private insurance company to ensure the maintenance or expansion of its competitive market position. These are the business acquisition costs to which I have already referred; second, Woods, Gordon suggested that the government insurer would experience a lower level of administration and delivery costs as a result of economies of scale and major structural differences between the government and private industry systems. While I have concluded on the basis of the available evidence that there are no significant economies of scale in the writing of automobile insurance, I have taken into account the lower level of administration and delivery costs that would result from the implementation of a public plan.

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[36] Select Committee on Company Law, First Report (1977), p. 242.

[37] The Select Committee, as well, did not recommend that Ontario convert to public automobile insurance.

In recognizing cost differentials between the public plans and private sector insurers, the Woods, Gordon Report and this Report are on common ground. While we may differ slightly as to the reasons for these cost differentials it is clear that we looked at the same areas and were in general agreement as to the capacity for gross cost savings; however, some qualifying observations are required. Since 1978, when Woods, Gordon considered this issue, public plan/private sector cost differentials have narrowed[38] to the levels referred to earlier in this chapter. It might also be noted that the Woods, Gordon private sector operating expense estimates may have been too high as their Report did not take into account the operating expense experience of four major Ontario insurers.[39]

The Woods, Gordon Report quite fairly recognized the difficulty of coming to a definitive conclusion on the efficiency issue, and I think even more significantly urged that "considerable care should be exercised in the interpretation of [its] conclusions."[40] The Woods, Gordon Report also addressed the serious start-up and implementation problems, and in doing so recognized the potential adverse consequences for some insurance company employees and for other parts of the insurance industry.

I have thus far dealt with issues addressed both by this Report and the Woods, Gordon Report. I have not made reference to the following additional factors listed in the Woods, Gordon Report. These additional factors include:

(a) the trend to inefficiency in management techniques and operations because of the lack of competition under a public plan;

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[38] This is mainly because the private sector has lowered costs.

[39] State Farm, Royal Insurance, Co-Operators and The Pilot.

[40] Woods, Gordon & Co., Government Ownership of Automobile Insurance, p. 76.

(b) the fact that hidden subsidies may be utilized to cloud true costs in a public plan;

(c) the possible illusion of low premium costs in a public plan;

(d) the possibility that the government corporation will become a political vehicle and deviate from sound insurance practices;

(e) the vulnerability of a public plan to labour problems and pressure groups such as body shop operators and tow truck fleet operators; and

(f) the tendency of a monopoly insurer to oversimplify adjusting decisions.

To the extent that any of these additional considerations have validity, they serve to weaken further the case for public automobile insurance in Ontario. I have not, however, resorted to these factors in proceeding to a judgment on the public automobile insurance issue.

(d) The New Democratic Party Submission

The submission from the New Democratic Party, the major participant in the public automobile insurance debate, requires some comment. The NDP support for public automobile insurance is unqualified.[41] Although I received a number of other submissions which supported government insurance, only the NDP submission attempted to address the government insurance issue in a comprehensive way.[42]

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[41] I intend to refer only to that part of the NDP submission that deals with public automobile insurance.

Most of the arguments advanced by the NDP in support of public automobile insurance have already been canvassed in this chapter. Nevertheless, I intend to make further brief references to some of the major points made by the NDP in its submission. I will start where the NDP started, with the premium comparison issue. As I have already discussed, premium comparisons are meaningless because premiums are driven by loss costs (which will vary between provinces and even between territories within a province) and because there is cross-subsidization in the public plans. For example, on the basis of 1986 figures, the average loss cost per car in British Columbia was $388; for the Toronto territory the average loss cost per car was $560.[43] This is a 44% differential. All other things being equal, this would suggest that Toronto territory premiums might well be expected to be in the area of 44% higher than in British Columbia. I refer specifically to this example because the NDP submission refers to an I.C.B.C. consultants' report which stated that Toronto premiums for "a mature driver with a mid-priced family car" averaged 35% more in Toronto than in Vancouver. Given the loss cost differential, the existence of this premium differential is hardly surprising; in fact, it would be surprising if it did not exist.

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[42] I also received an interesting, broadly-based submission on the public automobile insurance issue from Stephen Panzer, a law student recently graduated from Osgoode Hall Law School.

[43] See Table 15.1.

One does not even have to go outside British Columbia to observe territorial-based premiums differentials. The premium comparisons put forward by the NDP in an appendix to its submission include eight examples which include comparisons between Vancouver and Victoria premium rates. If factors other than territory are held constant, a driver in Vancouver consistently pays 22% more than the same driver with the same car would pay in Victoria.[44] I mention this not because it is wrong but because it is right. Premiums should differ if expected loss costs in one territory (Vancouver) are higher than in another territory (Victoria).[45]

On the issue of relative efficiency, the NDP submission relies on the 1978 Woods, Gordon Report to which I have already referred. Apart from the Woods, Gordon Report, I have already acknowledged the potential for cost savings based on more current data, were automobile insurance in Ontario to be delivered by a public monopoly. All that need be said here is that the potential for cost savings is considerably less than referred to in the Woods, Gordon Report which is now 10 years old. Moreover, the crucial question is not the potential for cost savings but the probability of actual cost savings. Because of that, it is necessary to take account of the major qualifications that have been referred to in that part of this chapter dealing with cost efficiency.

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[44] As these examples make evident, it is fallacious to suggest (as the NDP submission does) that Ontario premiums will be reduced under public automobile insurance to British Columbia levels, any more than Vancouver premiums will be reduced to Victoria levels.

[45] The NDP examples compare premiums not loss costs (i.e., pure premiums). Since all other factors have been held constant, one must conclude that the premium differentials between Vancouver and Victoria are based on territorial-based differences in loss costs. It is to be noted that data on loss costs (pure premiums) broken down by territory have not been made available by the public insurers. These data for the private sector are found in the Green Book.

I have already commented on arguments relating to investment within the provinces and public automobile insurance rating practices and do not propose to repeat what I said earlier.

One final matter deserves mention. The NDP submission deals at some length with what the submission refers to as the "major injustices of the private system". These "injustices" seem to fall within the areas of claims and underwriting abuses, both of which can be better addressed by reasonable legislation and regulation than by nationalization. Both have been considered in this Report.

G. CONCLUSION

Both in the introduction to this Report and earlier in this chapter I indicated that before Ontario expropriates the private sector automobile insurance industry and replaces it with a public monopoly there ought to be a clear and convincing case for government automobile insurance. The very proffering of that statement raises, I think appropriately, the question of onus. My conclusion on the public automobile insurance issue has not, however, turned on the application of this onus. In my opinion, Ontario taxpayers and drivers would not benefit from the conversion to public automobile insurance. The modest potential for cost savings particularly in the area of business acquisition costs would be offset in the short run by the substantial start-up costs of a public plan and would be completely eroded in the longer term by the other cost-based considerations earlier referred to, particularly the elimination of the potential for lower premiums derived from competition.

There are no compelling social benefits or other non-economic justifications which support the case for public automobile insurance. In fact, an assessment of factors unrelated to cost efficiency, particularly the elimination of freedom of choice and substantial employment dislocation (looked at from a non-economic standpoint), attendant upon conversion to a public plan, on balance, reinforces the case against public monopoly. As indicated earlier in this Report, I am not unmindful of private sector abuses. In my opinion these problems must be addressed but the appropriate solution is not nationalization. I, therefore, recommend that Ontario not introduce public automobile insurance.

CHAPTER 16

RATE REGULATION

A. INTRODUCTION

The insurance industry in Canada is regulated in a number of ways by the federal and various provincial governments. There are minimum solvency requirements, licensing requirements for insurers wishing to do business in a particular jurisdiction, requirements for the reporting of financial statements and claims experience, and requirements that the terms and conditions of automobile insurance policies be standardized. In addition, the federal and provincial superintendents of insurance exercise supervisory authority over the operations of insurers.

Except in the field of automobile insurance, government control over the insurance industry in this country has stopped short of regulating the rates charged by insurance companies. Rate regulation has become a common feature of the delivery of automobile insurance in most North American jurisdictions. Rate regulation is the regulation or review by government or by a government authorized agency of the premiums charged by insurers.

The historical development of rate regulation in the United States is dealt with by Professor Halpern.[1] In the United States, state governments have always had primary responsibility for regulating the insurance industry.[2] During the 1930s, a number of the practices of insurance companies were criticized and questions were raised about the rate-fixing activities of rating bureaus. This resulted in an anti-trust action against the Southeastern Underwriters Association. The United States Supreme Court, on a jurisdictional question, ruled that federal anti-trust legislation applied to the insurance industry.[3] In order to avoid the prospect of federal regulation, the industry lobbied to have primary regulatory control remain with the states. As a result, in 1945 the United States Congress passed the McCarran-Ferguson Act in which it declared that continued state regulation of insurance was in the public interest.[4] The Act specifically exempted from federal anti-trust laws any insurance company whose rates were effectively regulated by state laws. In order to take advantage of the McCarran-Ferguson exemption, almost all of the American states established state regulation of all forms of insurance.

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[1] Inquiry Research Study II.

The Canadian experience has been somewhat different. There has been no catalyst for government regulation of insurance premiums in Canada similar to that provided by the McCarran-Ferguson Act in the United States. One of the results of this has been the rather slow development of automobile insurance premium regulation here and the virtual absence of premium regulation in non-automobile lines of insurance.

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[2] In Canada, a federal presence has always been recognized in the regulation of insurance. See Citizens Insurance Co. v. Parsons (1881), 7 App. Cas. 96.

[3] U.S. v. Southeastern Underwriters Association (1944), 322 U.S. 533.

[4] Pub.L. No. 15, 79th Cong., 1st Sess., 59 Stat. 33, March 9, 1945, 15 U.S.C. Secs. 1011-1014 (1982). The statute provides that federal anti-trust legislation would "be applicable to the business of insurance to the extent that such business is not regulated by State law."

Regulation of automobile insurance rates did not come to Canada until the 1960s.[5] Nova Scotia, Alberta, New Brunswick and Newfoundland all have some form of rate regulation. Until November 4, 1987, Ontario and Prince Edward Island were the only provinces with virtually no government regulation of automobile insurance premiums. On November 4, 1987 the Ontario government gave first reading to Bill 2, "An Act to establish the Ontario Automobile Insurance Board and to provide for the Review of Automobile Insurance Rates."[6] I will discuss this legislation in more detail later in this chapter. Before doing so, I will outline the different kinds of rate regulation that have been employed in other jurisdictions.

B. TYPES OF RATE REGULATION

There are three basic models now used in the United States and Canada for the regulation of automobile insurance premiums. They are: (a) market competition; (b) file and use; and (c) prior approval. These are all models of rate review. There are other models but these three are the most common. None contemplates the actual setting of rates. This distinction is important in terms of the proposed Ontario legislation.

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[5] In discussing rate regulation, I am dealing only with regulation in those provinces where automobile insurance is delivered by the private sector.

[6] The Ontario Automobile Insurance Board Act, 1987.

(a) "Market Competition" Regulation

Under this type of regulation there is no formal approval of premiums. The regulatory agency monitors rates in order to identify those markets where market competition is not producing rates roughly approximating those which would occur in a perfectly competitive industry. In such cases, the agency may intervene. Otherwise, the market is left alone. There is generally no requirement for insurers to file their rates or data on loss experience.

The rationale for this regulatory model is that competition is the optimal regulator of prices, and that regulatory intervention is justified only where there is an absence of competition. California, Missouri and Idaho all have market competition regulation; Illinois has now totally deregulated automobile insurance and does not intervene in any form.

(b) File and Use Regulation

Under this regulatory model an insurer may put proposed rate changes into effect either immediately upon filing with the regulatory agency or after a relatively short waiting period. The insurer's filing typically includes proposed rates, evidence on losses, expenses and underwriting profits or losses. Hearings may be held if the regulatory body questions or disapproves of the insurer's rate submission, although in practice rate disputes are often resolved by compromise. Nova Scotia has had a file and use system for automobile insurance rates since 1960.

(c) Prior Approval Regulation

This model requires the filing and regulatory approval of proposed rates before they are used. In all prior approval jurisdictions, there is provision for a hearing to consider the insurer's rate submission. The scope of the hearing and the identification of those who are entitled to participate in it vary from jurisdiction to jurisdiction.

Among Canadian provinces, Alberta, New Brunswick and Newfoundland all have prior approval systems of rate regulation for automobile insurance. Alberta brought in its rate review legislation in 1970. It is administered by the Alberta Automobile Insurance Board, an independent agency created by statute. At present, the Board has four members. Its chairman is Mr. Justice Wachowich, an Alberta Court of Queen's Bench trial judge. The other members are an accountant, a broker and a representative of the public. The Board, where necessary, hires an independent actuary on a consulting basis to study the various rate proposals. The Alberta Board has jurisdiction only over the compulsory section of the policy as compared to, for example, the New Brunswick and Newfoundland boards which have jurisdiction over the whole policy. Public hearings are rare. Most rate proposals are dealt with on the basis of written submissions.[7] The

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[7] The Board has the same powers as a commissioner under the Alberta Public Inquiries Act.

Alberta Board takes a relatively informal approach to its deliberations, in part borne of the belief that competition is the best method to improve the price to the public.[8] It has been suggested that the Alberta Board has never failed to approve a proposed rate. Even if correct, this suggestion overlooks the fact that the very existence of a rate review board is likely to have a modifying effect on insurer behaviour, as well as the fact that in any given case the Board may privately have insisted an insurer make changes to its rates before approval would be granted. From the discussions I have had, it would appear that the Alberta rate review process is functioning well. As much as anything else, this may be a testimony to the personnel of the Board.

C. ONTARIO

Regulation of automobile insurance rates in Ontario has, up until now, been virtually non-existent. Section 369 of the Insurance Act prohibits the fixing of rates that unfairly discriminate between risks, but the section has never been proclaimed in force.[9] Section 371 of the Act gives the Superintendent the authority to order an adjustment of the rates for automobile insurance whenever he finds that any such rates are "excessive, inadequate, unfairly discriminatory or otherwise unreasonable",[10] but this section too has never been proclaimed in force. In the regular market, the only obligations on an insurer or a rating bureau (in practice, the Insurers Advisory Association (the I.A.O.)) are reporting requirements. Section 80 requires the filing of the statistical experience of insurers with the Superintendent. Under section 366 of the Act, a rating bureau and a licensed insurer are obligated to make a return under oath to the Superintendent showing every schedule of rates charged by them and any change of rates.[11]

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[8] The legislation also provides that if an insurer files proposed rates and the Board does not deal with the submission for 60 days, then the rates are automatically approved. This has never in fact happened.

[9] R.S.O. 1980, c. 218, as amended. Section 369(2) provides that the section does not come into force until proclaimed. Section 394 provides that no person shall engage in any unfair or deceptive act or practice in the business of insurance, but it has not been used in respect of alleged unfair rates. See Re Bates and Zurich Ins. Co., [1985] I.L.R. 1-1942; reversed [1987] I.L.R. 1-2148 (Ont. Div. Ct.).

The only formal rate regulation in Ontario occurs in the residual market. Facility Association rates are subject to the prior approval of the Superintendent. The Superintendent has 60 days within which to approve, disallow or vary the filing.[12]

The Superintendent exerts powers of moral suasion to control the activities of Ontario's automobile and other insurers. The fact remains that Ontario to date has operated on the premise that "he who regulates best, regulates least".

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[10] Subsection 371(1).

[11] It is an offence to deviate from rates that have been filed (section 366(4)).

[12] Compulsory Automobile Insurance Act, R.S.O. 1980, c. 83, s. 10.

That premise changed in the spring of 1987. Against the background of increasing premiums, complaints about abusive underwriting practices and the call for publicly delivered automobile insurance, the provincial government, on April 23, 1987, announced its intention to regulate automobile insurance rates. In a political response to a perceived or real political problem, automobile insurance premiums were frozen at April 23, 1987 levels, and premium roll backs in the range of 10% were prescribed for males under 25 years of age and for taxis. Draft legislation, "An Act to control temporarily Automobile Insurance Rates in Ontario" was prepared but never enacted because the industry agreed "voluntarily" to abide by its terms. Draft rate regulation was also prepared and circulated for comment. As I have indicated, the draft bill is now before the Legislature and it seems inevitable that Ontario will soon have some form of rate regulation.

D. THE ONTARIO AUTOMOBILE INSURANCE BOARD ACT, 1987

The proposed legislation, if enacted in its present form, will take Ontario from one of the least regulated to one of the most regulated jurisdictions for automobile insurance in North America. The regulatory control contemplated by the statute is not just rate review, but rate setting as well. The legislation combines elements of prior approval and file and use systems, but superimposes the initial establishment of rates by the regulatory agency itself.

The statute is to be administered by the Ontario Automobile Insurance Board whose members are to be appointed by the provincial Cabinet. The Board is given extensive powers with respect to practice, procedure, inspections and production of documents. The Board's orders are protected by a privative clause, but there is provision for an appeal, with leave to the Divisional Court of the Supreme Court of Ontario, only on a question of law or jurisdiction.

The legislation establishes a three-tiered procedure for setting rates on an industry-wide basis and for approving rates of individual insurers:

(1) rates are set within a classification system prescribed by Cabinet and set out in regulations under the Act. Insurers are obliged to use the prescribed classification system unless otherwise permitted under the Act;

(2) industry-wide hearings are held by the Board for the purpose of determining a rate or range of rates for each class within the prescribed classification system. Industry-wide hearings may also be held when rates or ranges of rates are reviewed. Notice of the industry-wide hearings must be given to the public. Every insurer is entitled to be a party at the hearing and the Board may name other parties. The rate or range of rates takes effect 120 days after the Board's order is made;

(3) each insurer must then apply to have its rates approved by the Board. In cases where an insurer's proposed rates or variations of previously approved rates fall within the range of rates set by the Board, its application is

deemed to be approved[13] 20 days after filing unless the Board advises otherwise.[14] In cases where an insurer wishes to charge a rate outside the range set by the Board, it requires prior and specific Board approval, and it must demonstrate "that the proposed rate is just and reasonable and not excessive or inadequate and that the circumstances of the insurer justify the use of the proposed rate." The legislation does not prescribe any time period within which the Board must approve, reject or vary a proposed deviated rate. While the Board's decision is pending, the insurer may charge the same rate or a lower rate than it was charging when the application was made. Accordingly, it is only proposed rate increases above rates set by the Board that cannot be implemented without prior approval. Nonetheless, insurers who want to use rates below the rates (or range of rates) set by the Board must apply for approval presumably against the criterion of "inadequacy".[15]

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[13] Where an insurer applies to use a rate which is the same as the rate set by the Board or within the range of rates set by the Board, the insurer only has to file a statutory declaration that it is using the rates set by the Board.

[14] The Ontario bill is similar in some respects to the "flex-rating" system of regulation adopted by New York State in 1986 for its commercial (but not automobile) lines of insurance. Flex-rating permits rate changes within a fairly narrow range on a "file and use" basis. Changes outside the range are available only on a prior approval basis. The theory is to allow some measure of competition, but to avoid sudden large premium increases.

Facility Association rates also require specific Board approval, but are not part of the industry-wide rate setting procedure. Insurers are prohibited under the Act from charging any rates not approved by the Board. There are transitional provisions that govern until the Board sets rates and that deal with the capping of rates on April 23, 1987. Fines of up to $100,000 are prescribed for a breach of the legislation.

E. THE CASE FOR RATE REGULATION

The threshold question is whether any form of regulation of automobile insurance premiums is appropriate. While I think the question deserves to be answered, it is clearly inevitable from a political standpoint that automobile insurance premiums in Ontario are going to be regulated. Quite apart from political realities, I regard some form of rate regulation as desirable. My endorsement of regulatory supervision of automobile insurance premiums does not include an endorsement of the concept of premium setting.

Although economists may be correct that in a competitive industry insurers will inevitably charge reasonable premiums, some outside review of insurers' premiums is socially, if not economically desirable. The consuming public, which in general has little knowledge about automobile insurance, I think, expects it. The public is required to buy automobile insurance and is entitled to some external protection against unreasonable or unjust premiums. Furthermore, the very existence of a rate review body will likely exert a modifying influence on insurer behaviour. From the insurers' perspective, rate regulation should also bring a measure of stability to the market.

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[15] See subsection 23(3).

Historically, instability has been manifested not only by questionable premium increases, but also by premium decreases. Rate regulation should control both inappropriate rate increases and decreases. When an insurer increases premiums other insurers may well decide not to follow. The situation is different when an insurer lowers premiums. When that occurs, other insurers have two choices: they can either follow that lead and drop prices, or maintain present price levels and lose business to the competition. When profit margins are high, the answer is clear and presents no problem: drop prices. The answer is not so clear when the insurer is operating at a break-even point, or losing money.

Two factors motivate an insurer to drop prices even though it may seem at first blush to be inappropriate to do so. Both relate to the cost of re-establishing market share. First, it is significantly more costly to write new business than to renew existing business. Second, historically, loss ratios of newly written business are significantly higher than the loss ratios for existing business. This seems to be a product of the benefits of renewing known risks as opposed to the uncertainties of writing unknown risks.[16] The result is once even a reasonably-sized insurer reduces premiums, there is an incentive for others to follow. Inevitably, upward corrections have to be made and they can be painful for the consumer: witness the premium increases in 1985-86.

I conclude that from a social policy viewpoint, if not from a purely theoretical economic viewpoint, some form of rate regulation for the automobile insurance industry in Ontario is desirable. Accepting that as a given, the real question turns on the extent of that regulation.

The basic thesis of Professor Halpern's study is that the degree of government intervention should be proportional to the extent to which the market deviates from the competitive norm or, in other words, the extent to which the competitive market does not reach its full potential. To use an overly intrusive regulatory response when less intrusive measures will adequately address the perceived problems is likely to be very costly to the economy and to the consumer.

Although in my opinion there are other issues which merit consideration it is at least necessary to examine the state of competition in the Ontario automobile insurance industry.

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[16] One major insurer informed me that policies that are in their first annual term (new business) have an average loss ratio that historically runs between 20-25% higher than old business. In this regard there may well be a difference between an insured who changes brokers and insurers, and an insured who continues to do business with the same broker but changes insurers. In the latter case, the insured is at least known to the broker.

F. COMPETITIVENESS IN THE ONTARIO AUTOMOBILE INSURANCE INDUSTRY

Professor Halpern and his colleagues examined this issue by considering the structure of the industry and the conduct and performance of the companies within the industry. Market structure includes, among other things, the number of firms, their size distribution, the ease of entry and exit and the potential for collusive activities.

The number of firms in the Ontario automobile insurance market is large by any standards. In 1984, there were 157 companies writing automobile insurance premiums. Some of these companies were under common ownership. When this factor was taken into account there were 112 groups[17] writing automobile insurance policies in the province.

While the absolute number of firms gives some indication of the competitive nature of the industry, it does not take into account the relative size distribution of the companies. Relative size is significant in the sense that the potential for collusion or monopolistic control is more likely in an industry where say five firms account for 90% of industry sales than when those firms account for only 20%. To assess the degree of industry concentration, economists have developed two indices of measurement. One is the concentration ratio; it measures (in the automobile insurance context) the proportion of direct premiums written by a given number of firms. The second is the Herfindahl index; it is the sum of the squares of each firm's market share divided by the number of firms. In a pure monopoly, the value of the Herfindahl index is 1.0. The greater the inequality of market shares, the closer the value of the index will be to one.[18] Conversely, as the number of firms becomes larger, the Herfindahl index approaches zero.

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[17] The figure comes from Professor Potvin's paper. See Inquiry Research Study II. A "group" refers to one or more insurance companies under common ownership. Of the 112 groups, 63 accounted for 99.09% of direct premiums written.

In 1984, the largest company, Co-Operators Insurance, had 9.39% of the Ontario market; Zurich Insurance which ranked 8th had 3.64% of the market; and Gore Mutual which ranked 20th had 1.60% of the market. Looking at concentration ratios for 1984, the top four firms accounted for 27.8% of direct premiums written, the top 8 firms 44.53% and the top 20 firms 73.95%.

The Herfindahl index had a value of .0370 in 1984. This is equivalent to 27 entities of equal size. Professor Potvin's study indicates that industry concentration, which had increased between 1974 and 1979, has been falling since 1979 with the result that 1974 and 1984 values are approximately the same. Furthermore, a comparison with 20 selected Canadian industries indicates that over one-half of those industries are less competitive than Ontario's automobile insurance industry.[19] The conclusion which emerges from this analysis is that the structure of the automobile insurance market is consistent with a highly competitive industry. Moreover, as Professor Halpern observes, this analysis likely underestimates the degree of competition since it does not take account of potential competition. Moreover, the large number of firms in the industry and their relative size distributions make collusion unlikely.

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[18] This is because the index is based upon the squared value of each firm's market share.

In addition to industry concentration, the existence or absence of barriers to entry into and exit from the industry are a reliable indication of market competitiveness. On this subject, Professor Halpern's study comes to three important conclusions. First, external barriers to entry, in terms of government regulatory requirements,[20] sunk costs,[21] the establishment of a brokerage or agency system and the reinsurance market,[22] are minor and should not affect ease of entry or exit. Second, internal barriers to entry are also minimal; there do not appear to be any economies of scale[23] in automobile insurance and only minor economies associated with delivering more than one line of insurance.[24] Third, the empirical evidence on entry and exit is consistent with the absence of barriers to entry. Between 1975 and 1984, 67 groups entered the Ontario market and 87 left. In short, the cost structure in the industry and its impact on entry and exit is consistent with a competitive market.

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[19] Potvin uses national concentration measures for the 20 selected industries, but Ontario concentration measures only for automobile insurance. Since a given industry will usually appear more concentrated, the smaller the geographical area the comparison is somewhat biased in making the automobile insurance industry appear more concentrated than if national figures for the automobile insurance industry were used. Even so, it remains by comparison quite competitive.

[20] Halpern concludes that minimum capital and surplus requirements of at least $1 million and the premium/equity capital ratio requirements do not inhibit entry.

[21] Sunk costs refer to the investments made by existing companies such as costs relating to the establishment of a distribution system and the establishment of a company regulation. Halpern concludes that the effect of this factor on barriers to entry is small.

Halpern also considered whether the existence of the I.A.O., a rating bureau which publishes recommended automobile insurance rates based on target expense and loss ratios, could facilitate monopolistic pricing. Given that not all companies are members of the I.A.O., that there is no obligation even on members to abide by the recommended rates and that there is no mechanism within the I.A.O. to enforce cartel-like behaviour, the conclusion that the I.A.O. does not facilitate collusion among insurers seems reasonable.

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[22] A monopolistic reinsurance market might inhibit entry. Halpern finds, however, that the automobile reinsurance market, while more concentrated than the automobile insurance market, is still consistent with a competitive industry.

[23] Economies of scale refer to decreasing average costs as the output of a particular product increases.

[24] Halpern refers to the interactions among products (or different lines of insurance) as economies of scope. In the insurance context, economies of scope will exist if the marginal cost of writing more automobile insurance depends upon the existence of other lines of insurance.

Finally, Halpern evaluated the performance of the Ontario automobile insurance industry to determine whether it was consistent with competitive or monopolistic behaviour. The evidence that bears on this question is referred to in Halpern's Inquiry Research Study[25] and has been discussed in Chapter 15. Halpern concluded that the performance of the industry is essentially competitive.

The conclusion that the automobile insurance industry in Ontario is competitive must be qualified in three important respects. First, while there are a large number of companies selling automobile insurance in the province, in practice, consumer choices are, in many instances, much more limited. Automobile insurance is sold through brokers and captive agents.[26] Few brokers represent more than five or six insurers; many represent less. Consumers by and large are unaware of this. Captive agents represent one insurer. Through lack of knowledge, or for other reasons, many consumers do not shop around among brokers and agents.[27] In a real sense, the broker and agent distribution system fragments the competitive market. The problem is accentuated in rural areas where there is often only one agent or broker. Even if a prospective buyer of automobile insurance were inclined to seek out the best prices, his choices are in practical terms often restricted.

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[25] Inquiry Research Study II.

[26] Captive agents are sales agents for direct writers.

[27] Obviously, some consumers do shop around. Halpern estimates that the lapse rate with the insured's current broker is about 15 to 30% per year.

Second, in some particular markets competition is in fact quite limited. Taxicabs are one example; only two or three companies write this business. One result is that many taxicab owners find themselves insured through the Facility Association. Other examples of particular markets where the choice is limited include motorcycles, inter-urban trucks, funeral hearses, ambulances, and high risk private passenger vehicle operators. The conclusion about the competitiveness of the industry as a whole does not apply to these particular sub-markets.

Third, an examination of those insured in the Facility Association confirms the absence of competition for the business referred to above. The Facility Association pooling arrangement, participated in by all insurers, is by definition non-competitive.

G. ASSESSMENT OF THE PROPOSED ONTARIO RATE REGULATION LEGISLATION

Before making some general comments about the draft Ontario legislation, I propose to set out what I think the objectives of legislation of this kind ought to be. This is a separate issue from whether there should be any form of rate regulation in the first place. That issue was discussed earlier in this chapter.

Given a reasonable classification system and leaving aside individual underwriting abuses, in my opinion the two dominant objectives of rate regulation should be premium fairness as assessed against sound insurance principles and market stability which will enure to the eventual benefit of the public. Appropriate rate regulation should provide a cost efficient mechanism for ensuring that premiums charged by individual insurers are fair and for ensuring market stability.

It seems clear to me that to the extent the insurance industry supports the proposed form of rate setting and rate regulation, that support is premised on the insurers' perception of a need for market stability, not on the view that regulation is required to ensure fair premiums. If forced to make a choice, in my opinion the objective of premium fairness is far more important than that of achieving market stability. Premium fairness will not be achieved if the regulatory scheme is unnecessarily costly or if it works to inhibit competition among insurers. The proposed Ontario legislation is suspect on both counts.

The legislation contemplates a very rigid classification system prescribed by regulation and not under the control of the Board. This combination will inhibit insurers from being innovative in their rating procedures. The ability to innovate and to refine the classification system is beneficial to consumers; legislation which restricts that ability is not. It is not entirely clear to me whether the Board will have the power to approve deviated rates where refinements to the classification system may be involved but where the rates are otherwise just, reasonable and sound in principle. In some way the Board should clearly have this power. Some have suggested that the Board be given jurisdiction over the classification system and, I assume, the authority to permit insurers to introduce refinements to the system.[28] This may work. Giving the Board authority over the classification system will likely have the advantage of depoliticizing the establishment of appropriate rating criteria. If this approach is taken the Board must have the power to modify the classification system. However it is done, insurers should not only have the right to innovate within reasonable perimeters, they should be encouraged to do so. I do not envisage the approval of deviated rates on the basis of socially unacceptable rating criteria, however actuarially sound these criteria may be. For example, if sex is held to be unacceptable on constitutional or other grounds it should not be used under any circumstances.

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[28] The I.A.O. makes this point in a letter dated August 23, 1987 to the Minister of Financial Institutions. The I.A.O. has also expressed concern about subsection 11(6) of the draft legislation which provides:

> Where two or more parties have a common interest in respect of an application to the Board, the parties may authorize one or more of those parties to represent all of them and any order made by the Board may be made applicable to all.

The concern is that the I.A.O. might be asked to make submissions on behalf of some of its members and yet the subsequent ruling may bind all members. In the I.A.O.'s view, this provision may jeopardize its ability to provide actuarial assistance to smaller insurers who do not have their own "in house" actuaries. The I.A.O. wishes to be able to make submission on its own without precluding member companies from making their own individual submissions. If the I.A.O. submission is agreed to by member companies, the I.A.O. suggests that the member companies need simply indicate as much. I am in agreement with the I.A.O.'s position, on subsection 11(6).

The most significant feature of the Ontario bill is the provision for the setting of rates following an industry-wide hearing. It is this feature which distinguishes Ontario's proposed statute from rate regulation in other provinces, or for that matter from the file and use or prior approval systems used to review automobile insurance rates in the United States.

The Ontario bill, at the industry-wide hearing level, parallels the regulatory model for public utilities. This regulatory model is essentially "cost plus" regulation. The basic rationale for this kind of regulation is that the utility is a monopoly and thus there is no competition to generate acceptable prices or to provide restrictions on excess profits. It seems to me that the public utility model of regulation is inappropriate to a competitive industry even if the product is compulsory. Given a competitive industry, public utility type regulation will in the long run encourage inefficiency at least in the sense it does not provide positive incentives for efficiency.

What is going to be accomplished by these industry-wide hearings? What will emerge is a series of rates (or ranges of rates) for the various prescribed classes of risk which will inevitably compress rate differentials that now exist among insurers. If the rates or ranges of rates were consistent with those generated by competitive pricing, I would be less troubled by the legislation. That, sadly, will not happen as I see it. Because benchmark rates will take account of the experience of all insurers, efficient and inefficient, the benchmark rates will congregate around the average industry experience. Hence the public will be denied the benefits of true competition, and on a more specific level, will be denied the benefit of lower than benchmark rates which would be charged by the more efficient insurers in a truly competitive market. While efficient insurers could seek approval for lower than benchmark rates, they may not have to do so in order to maintain or even increase their market share. I concede that industry-wide hearings may achieve a measure of stability. Consumers would prefer lower premiums.

There is also the matter of cost. Any form of rate regulation will involve some costs. I do not think it is unreasonable to measure these costs against the benefits of the proposed regulatory scheme. There are two dimensions to the cost component of the scheme envisaged by the proposed Ontario legislation. There are the internal costs of the Board and there are the external costs related to the entire regulatory process, including particularly industry-wide hearings. The requirement for industry-wide hearings means that there will have to be a sizeable bureaucracy established to administer the scheme. The proposed legislation provides that the expenses and expenditures of the Board are to be paid by individual insurers on a pro rata basis and thus indirectly by Ontario motorists.[29]

The industry-wide hearings themselves are going to be lengthy, cumbersome and expensive. Actuaries will be required; undoubtedly so will lawyers. The costs of these hearings are going to be inordinately high. These costs, too, will be passed on and paid for by Ontario motorists.

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[29] See section 10. I note that this approach is not taken in Alberta where the costs are paid out of general revenues. I endorse the Ontario approach.

I recognize that industry-wide hearings will in many instances make the rate approval process for individual insurers almost a formality, provided approval is not sought for deviated rates above the rate or range of rates established by the Board. Additional costs incurred at the industry-wide hearing level will be partially offset by reduced costs at the level of the approval of individual rate applications. An insurer wishing to charge a deviated rate (above the rate or range set by the Board) will be exposed both to the expense of the industry-wide hearings and its own rate application which requires prior approval by the Board.

If these additional costs were justified by a process which resulted in lower premiums, I would not be so critical of this legislation. While the process will lead to premium stability, it will not lead to lower premiums. The form of the process will result in increased costs which will inevitably be passed on to consumers. The substance of the process will deny consumers access to the lower premiums generated by the more efficient insurers in a competitive market.

To my initial surprise, during the course of this Inquiry it became apparent to me that a significant number of insurers supported the proposed form of rate setting and rate regulation. That support alone might cause one to pause. It is now clear to me that the insurers supporting this legislation view it as a vehicle through which real price competition can be avoided, and profit stability can be virtually guaranteed through the rate setting process.

There is one further matter concerning industry-wide hearings that deserves comment. The legislation encourages consumer participation at these hearings. If the industry-wide hearings process is to remain part of the legislation, I think public participation is to be encouraged. The effectiveness of that participation, however, is a crucial consideration. Without the provision of funding, I cannot see how public participation can be meaningful. Those representing the public must have access to actuarial and other experts and to industry data. Otherwise, public participation is unlikely to be of much assistance to the Board.

The industry-wide hearing process for the setting of rates must be distinguished from the process contemplated for approving the rates of individual insurers. The draft bill contemplates a form of file and use if the insurer's rates are within the range established by the Board; and a form of prior approval for deviated rates. In my view, the distinction between prior approval and file and use is less important than the manner in which the regulatory agency actually supervises individual insurers in the process of approving their premium rates. Prior approval has worked well in Alberta; file and use systems have been successfully resorted to in many jurisdictions in North America. I tend to disagree with Halpern's strong preference for file and use, but I do subscribe to the view that the rate approval process should not unduly inhibit competition. A rate board's fundamental mandate is to ensure that consumers obtain the benefit of reasonable, just premium rates. That will only happen if insurers are allowed, or some would suggest forced, to compete.

The regulation of Facility Association premiums requires a brief comment. In the proposed legislation, Facility Association premiums are subject to Board approval. Under the Compulsory Automobile Insurance Act,[30] Facility Association rates require approval by the Superintendent of Insurance. I do not regard the source of approval to be of much importance. What is more important are the criteria to be resorted to in the setting of Facility Association premiums. The proposed legislation requires the Facility Association to "demonstrate that the proposed rates are just and reasonable and not excessive or inadequate". Under the current legislation, the onus is reversed and the statutory criteria are more specific. The Superintendent can only disallow or vary a Facility Association rate filing where in his opinion "the rates are not in accordance with statistical evidence or experience or other justifiable factor".

Whatever statutory criteria are used, it is inescapable that the approval of Facility Association rates will involve substantial social policy considerations.

I think it must be recognized at the outset that Facility Association premiums are not now, and in practice will not be, self-sustaining. In other words, premiums in the Facility Association are lower than the expected loss costs of those who populate the Facility Association suggest they should be. This inevitably means that there is a measure of cross-subsidization arising out of the rate structure. Drivers in the regular market are paying higher premiums than they otherwise would in order to subsidize drivers in the Facility Association. The extent of cross-subsidization in the residual market in Ontario has been relatively modest. I think it is significant and wrong that there has been no real acknowledgement that there are social policy considerations relating to the setting of Facility Association premiums, and no discussion of what social policy considerations should dominate.

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[30] R.S.O. 1980, c. 83, s. 10.

Some seductively simple solutions have been proposed to resolve what many view as a central dilemma, namely the significant differential between regular market premiums and Facility Association premiums. The focus of this concern is on clean drivers who for whatever reason find themselves insured in the residual market. This problem was discussed in Chapter 7, as was the I.B.C.'s proposed solution.

I have the following recommendations which are the product of my view that it is critical to come to grips with issues bearing upon the residual market including residual market premiums immediately.

1. Clean risks in the residual market are the main problem. I recognize that the loss ratio of that group is bad. Nevertheless, it seems hard to justify the high premiums charged to those good clean risks in the residual market. Moreover, I am fearful that with the advent of the new classification system and

the proposed form of rate regulation, the population of the Facility Association may expand. I, therefore, recommend that for clean risks we return to the old Facility ceding arrangements. How much of a clean risk could be ceded should be discussed by the insurance industry, the Facility Association and the Superintendent of Insurance. I do not regard the issue of whether ceding will be at 85% as was the case in the Facility, or at some different level, to be a matter of great immediate consequence. The ceding should occur at the insurer's book premium unless the insurer's premium is below the range of rates set by the Board. For the purpose of this recommendation, I am assuming that the Board will retain a rate setting function.

2. For demonstrably bad risks, the Facility Association pooling mechanism should continue to be used. The draft legislation requires the Board in approving Facility Association premiums to use the same criteria as used for approval of regular market rates of individual insurers. Inevitably, Facility Association premiums will be premised as much on social policy considerations as on actuarial evidence. The Board will have to determine the extent to which cross-subsidization is justified in the Facility Association rate approval process. In practice, the Facility Association will present evidence of its expected loss costs and other relevant statistical data, much as an insurer would. The Board will then be called upon both to respond to the evidence presented, and apply to social policy considerations implicit in the approval of premiums that demonstrably will not meet expected loss costs.

I do not think it is desirable that the consideration of these social policy issues be left solely to the insurance industry (through its Facility Association representation) and the Board. There must be a voice to represent the public interest. This can best be accomplished through the office of the Superintendent of Insurance. I, therefore, recommend that the Superintendent of Insurance be permitted to participate in the Facility Association premium approval process. Whether this involves a formal rate filing can best be left to the Board.

CHAPTER 17

MOTOR VEHICLE ACCIDENT PREVENTION

Although not strictly within my terms of reference, I did not wish to end this Report without making some reference to accident prevention. The discussion about loss costs and premiums should not obscure the fact that the best available cost control device is effective accident prevention. If the frequency and severity of accidents can be reduced, not only will premiums fall, but more importantly, lives will be saved and the tragedy of disability will be lessened.

A. THE SOCIAL AND ECONOMIC COSTS OF MOTOR VEHICLE ACCIDENTS IN ONTARIO

The social and economic cost of motor vehicle accidents is staggering. In 1986, approximately 6% of Ontario drivers were involved in 187,286 reported motor vehicle accidents; over 100,000 were injured; 1,102 were killed.[1] The average Ontario driver, if licensed at age 16, will drive 650,000 kilometres, become involved in two motor vehicle accidents and be injured in one of them. One in 100 will be killed.[2]

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[1] Ontario Road Safety Annual Report, 1986.

[2] The average distance driven in 1986 was 11,768 kilometres. Assuming that a driver gets his licence at age 16 and drives for 55 years, he will drive 647,240 kilometres over a lifetime. The accident rate is 274 per 100 million kilometres driven. The injury rate is 1.6 per million kilometres driven, which translates into 1.03 injuries in 647,240 kilometres driven. The death rate is 1.6 deaths per 100 million kilometres driven, or .010 deaths in 647,240 kilometres, which translates into a 1 in 100 chance of being killed. (Ontario Road Safety Annual Report, 1985).

The tragedy of motor vehicle accident fatalities is accentuated by an assessment of those who are killed. As in war, those killed in motor vehicle accidents tend to be young, healthy and male. Motor vehicle accidents are the leading cause of death for males between ages 15 and 24. Forty percent of males who die between ages 15 and 24 die as a result of motor vehicle accident injuries.[3]

When women are considered, the death rate percentage figures do not change significantly, although there are many more young men than young women who die as a result of car accidents. Figure 17.1 shows the major causes of death in Canada in 1985 for all age groups and for the age group 15 to 24. Automobile accidents account for 2.3% of deaths in all age groups but 38.9% of deaths in the 15 to 24 age group.

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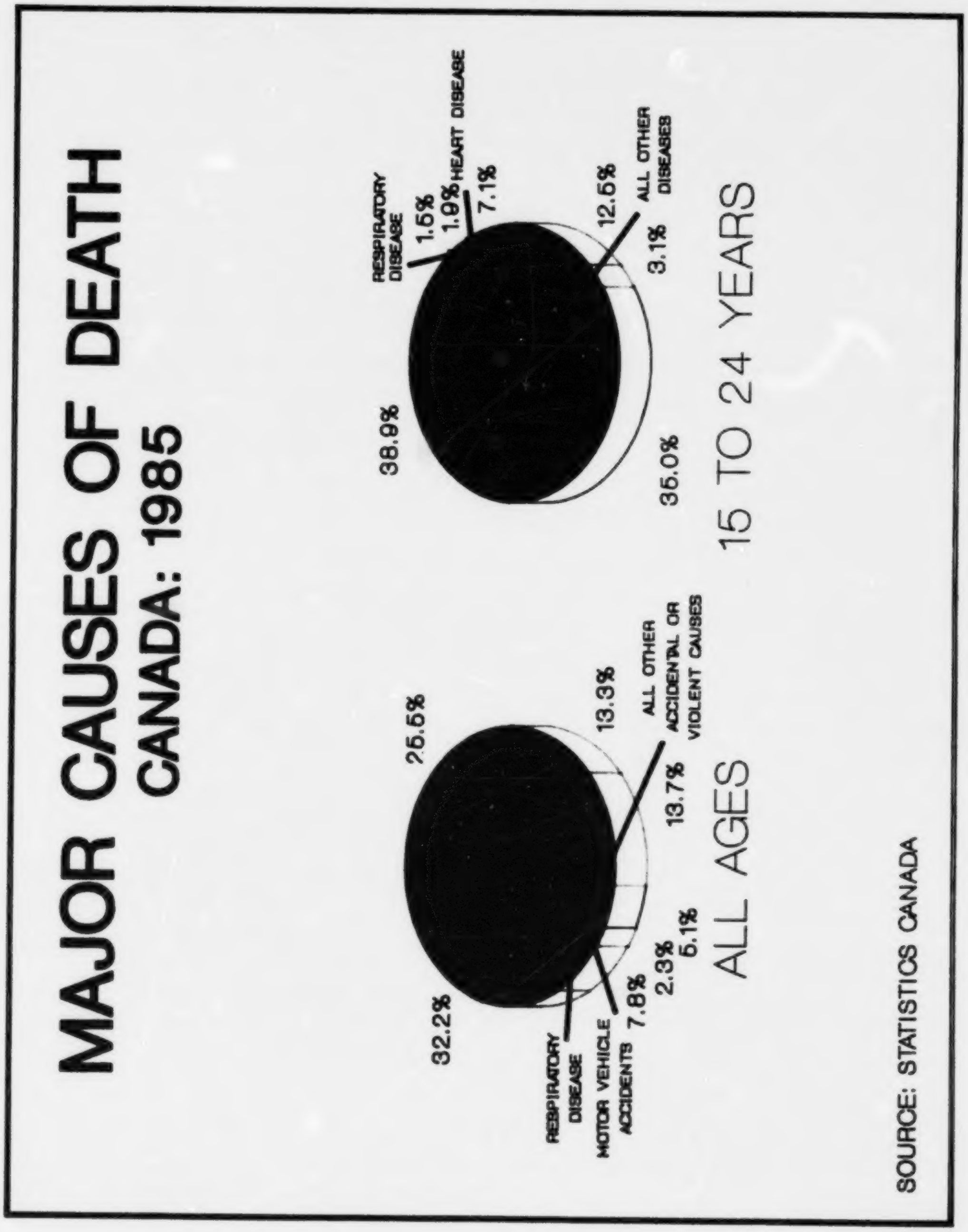
[3] Statistics Canada: The death rate per 100,000 in that group is 47.6 for males 15-24. Suicide is next at 24.6 deaths per 100,000 population. All other accidents claim 18.25 lives per 100,000 population. The total death rate is 119.8 per 100,000 males between 15-24. 47.6 as a percentage of 119.8 equals 39.7%.

Figure 17.1



SOURCE: STATISTICS CANADA

The human suffering and the social dislocation caused by motor vehicle accidents cannot be economically measured, but there have been attempts to estimate the pure economic costs of motor vehicle accidents. Two such studies require brief comment. Both are discussed in more detail in Appendix IX.

In 1982, the U.S. Department of Transportation attempted to calculate the economic cost of motor vehicle accidents in the United States. The data then collected were updated in 1985. This study concluded that the economic cost of motor vehicle accidents in the United States was approximately $23.5 billion, expressed in 1984 dollars.

A 1982 Ontario study estimated the economic cost of motor vehicle accidents in Ontario to be about $1 billion dollars. This is consistent with the findings of the American study referred to above when population differences are taken into account. If adjustments are made for some of the questionable assumptions of the Ontario study[4] and the figures are expressed in 1985 dollars, the Ontario loss figure is approximately $1.7 billion.

In 1985 dollars, economic loss resulting from Ontario motor vehicle accidents is approximately $187 for every man, woman and child in the province or $292 for every licensed driver in Ontario.[5] These figures do not take pain and suffering resulting from motor vehicle accidents into account.

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[4] See Appendix IX.

B. ACCIDENTS: TRENDS AND RATES

Depressing as motor vehicle accident statistics may seem to be, the news is not all bad. The risk of driving has improved over the past 50 years. The number of fatal accidents has declined; the number and rate of bodily injury and property damage accidents has remained relatively stable in the last 10 years. There has been a significant decline in the fatal accident rate in the past 20 years; in the last 5 years the fatal accident rate has remained stable.

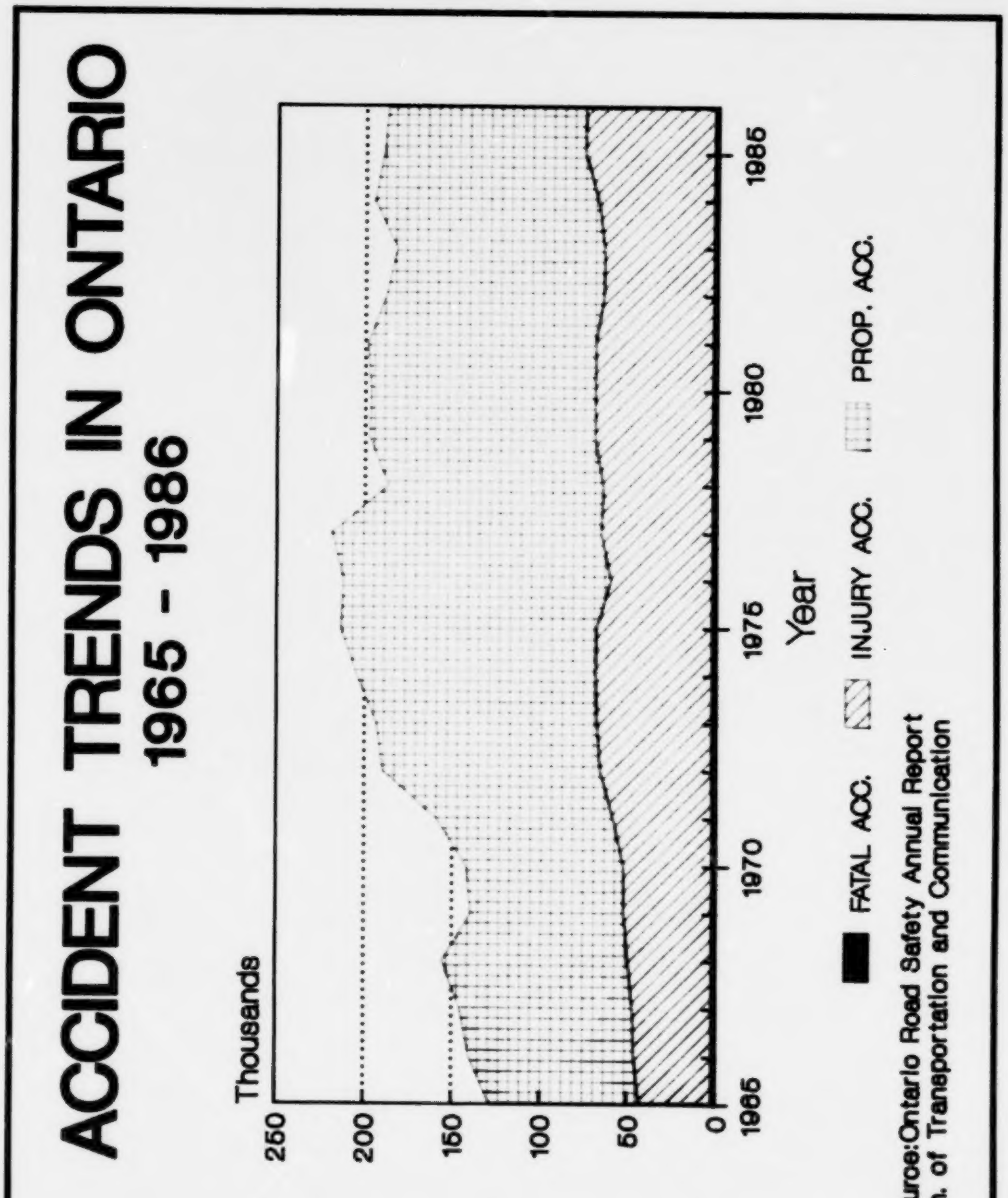
(a) Trends

Figure 17.2 sets out the number of property damage, bodily injury and fatal accidents in Ontario between 1965 and 1986. The red fatal accident line on Figure 17.1 is almost invisible because the number of fatal accidents is small compared to the number of property damage and bodily injury accidents. Fatal accident trends are therefore set out separately on Figure 17.3. Figure 17.2 shows that the number of bodily injury accidents has remained relatively stable. The property damage line is less stable. The number of property damage-only accidents hit its peak in 1977. From 1978 to 1986 Figure 17.2 shows a relatively stable property damage accident line.

---

[5] Ontario population reported in the Ontario Road Safety Annual Report, 1985 was 9,066,000. Dividing this into a cost of motor vehicle accidents of $1,697,921,213 results in a per person cost of $187.28.

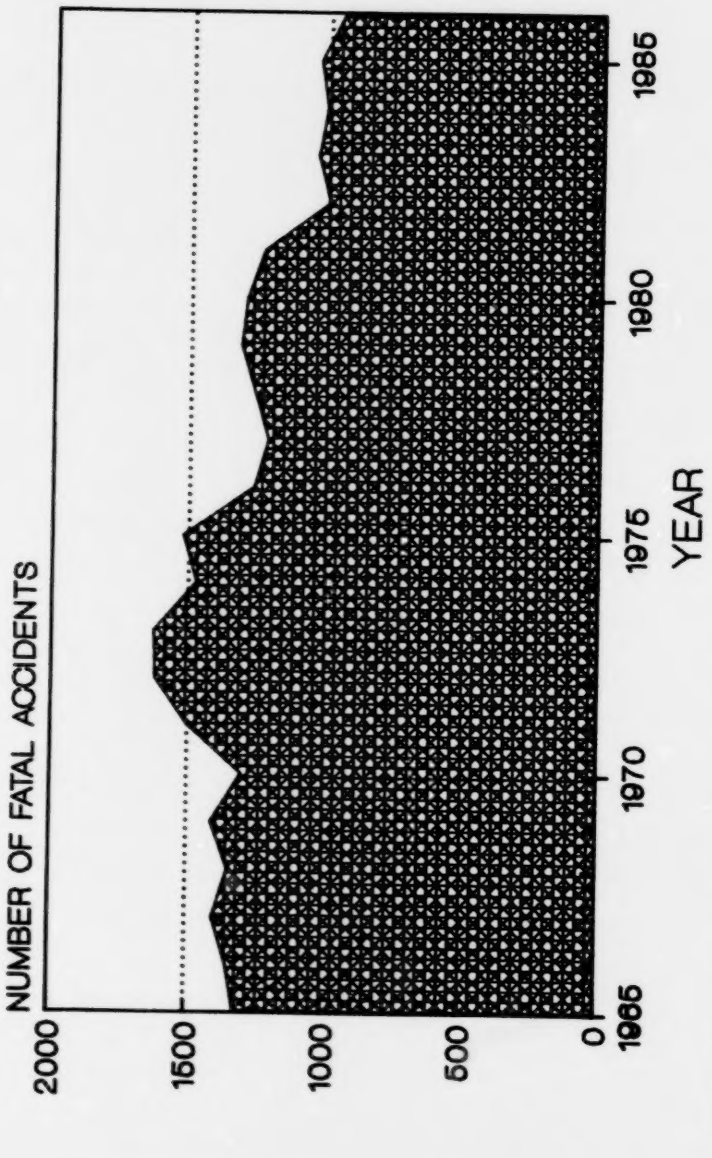
Figure 17.2



Source:Ontario Road Safety Annual Report
Min. of Transportation and Communication

Figure 17.3

FATAL ACCIDENTS IN ONTARIO
1965 - 1986



SOURCE:Ontario Road Safety Annual Report
Min. of Transportation and Communication

Figure 17.3 shows the total number of fatal accidents in Ontario between 1965 and 1986. The 1976 drop in fatal accidents is generally attributed to a reduction in speed limits and the introduction of mandatory seat belt legislation. There is a debate among traffic safety experts as to the impact of each change; there is, however, a consensus that both speed limit reduction and mandatory seat belt legislation worked to reduce the number of fatal accidents on Ontario highways.

To the extent that the number of property damage and bodily injury accidents has increased over the 1965 to 1986 period, that increase is largely attributable to an increase in road use, and roads to use.[6]

(b) Rates

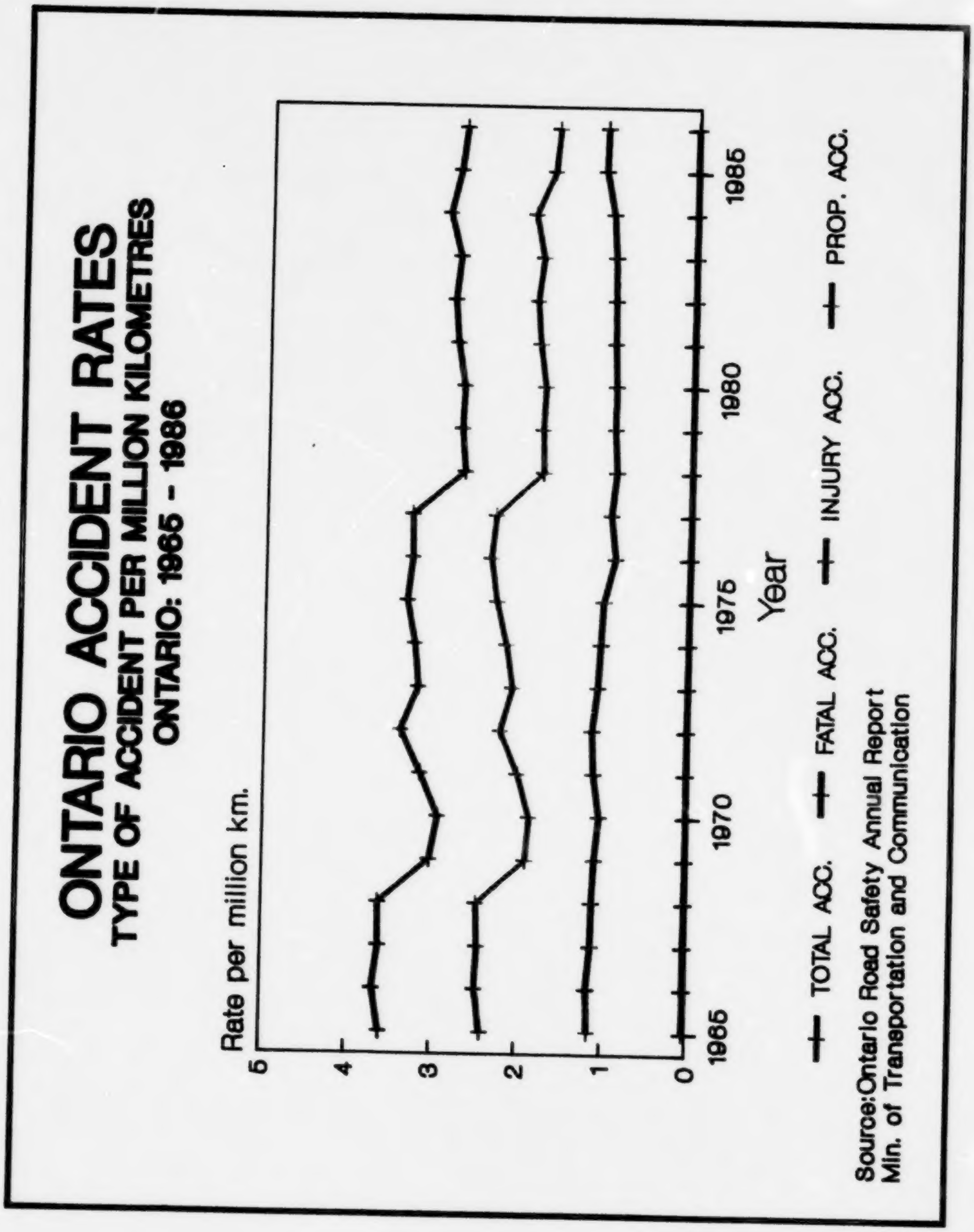
Having briefly referred to the absolute number of motor vehicle accidents, I will next consider the rate of motor vehicle accidents. For road and traffic safety analysis purposes, the rate of motor vehicle accidents is usually measured by the number of motor vehicle accidents per 100 million kilometres driven.

The rate of Ontario accidents per 100 million kilometres driven can be seen on Figure 17.4. Figure 17.4 shows stability in the bodily injury accident rate. The

---

[6] M. Friedland, M. Trebilcock and K. Roach, Regulating Traffic Safety (University of Toronto, 1987) states that road stock increased from 4,655 kilometres in 1931 to 160,142 kilometres in 1985. Kilometres driven increased from .5602 million kilometres in 1931 to 72,419 million kilometres in 1980.

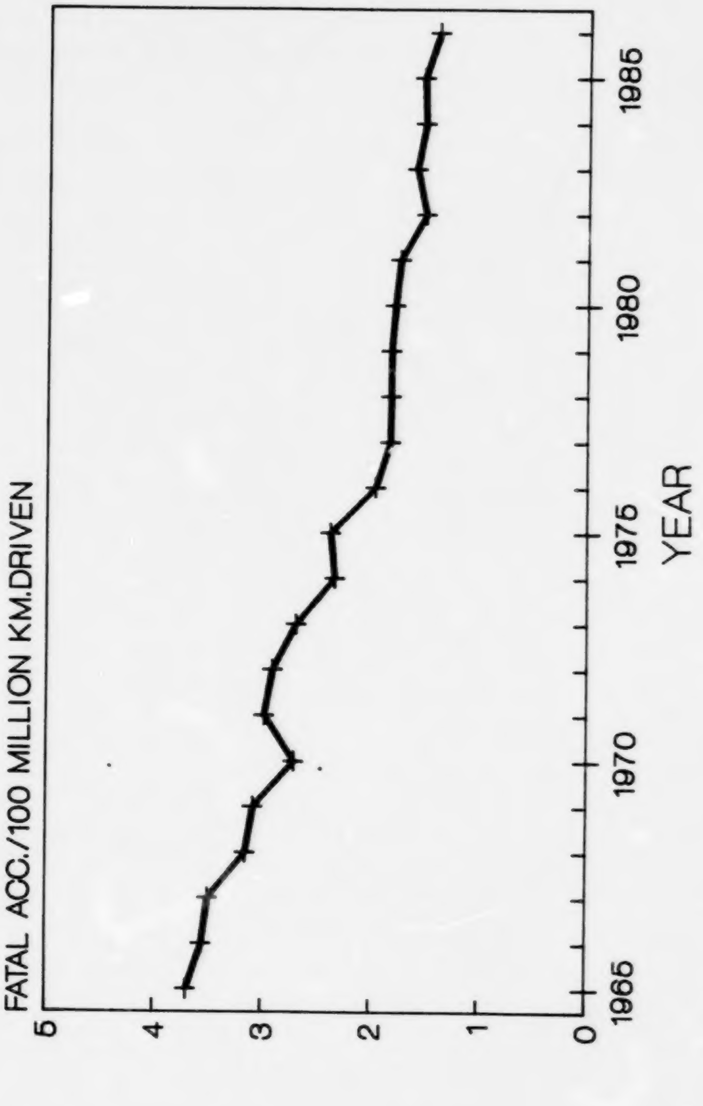
Figure 17.4



Source: Ontario Road Safety Annual Report
Min. of Transportation and Communication

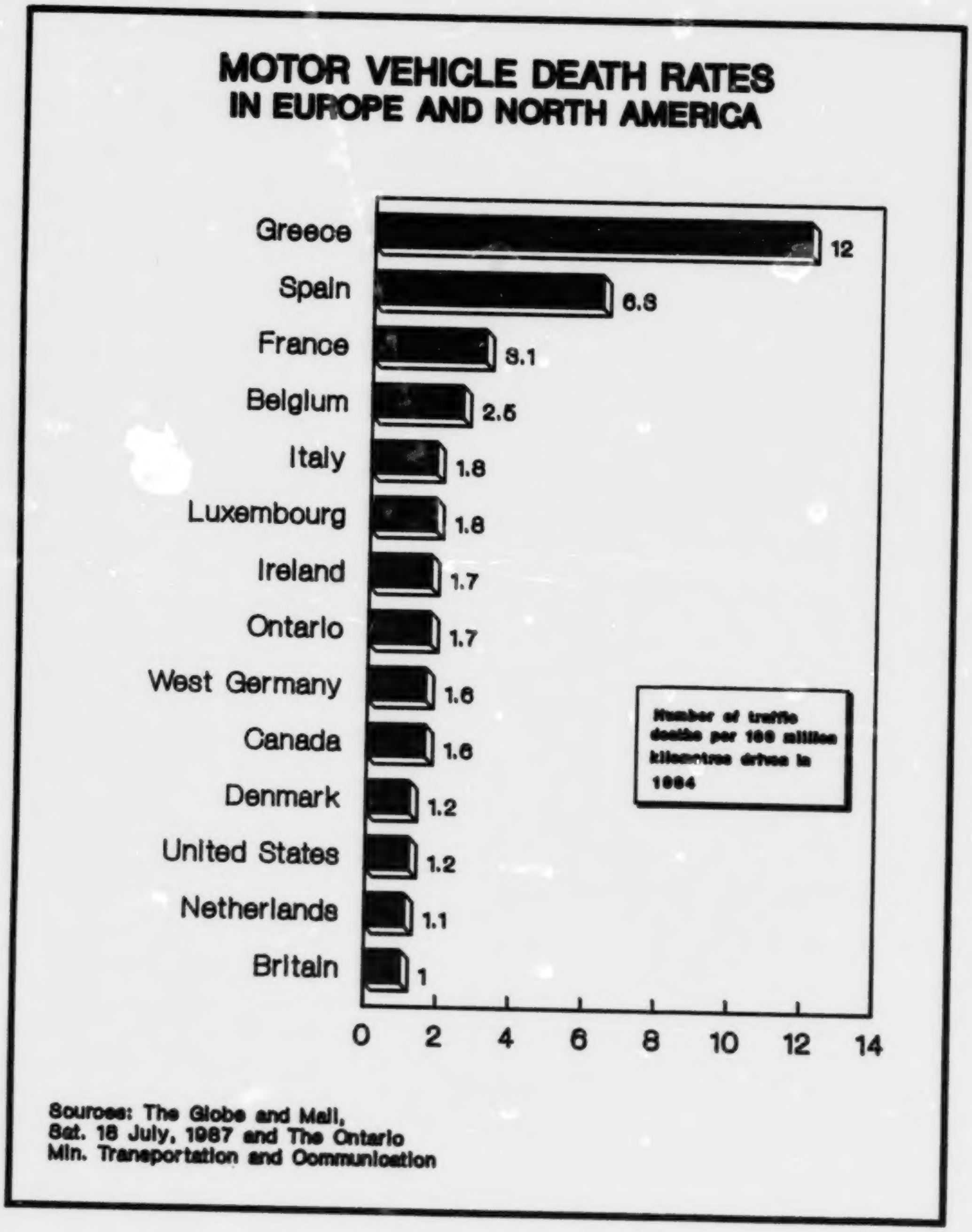
Figure 17.5

FATAL ACCIDENT RATES
ONTARIO: 1965 - 1986



Source:Ontario Road Safety Annual Report
Min. of Transportation and Communication

Figure 17.6



Sources: The Globe and Mail,
Sat. 18 July, 1987 and The Ontario
Min. Transportation and Communication

rate of property damage accidents declined in 1977 and has more or less stabilized since then. Because the number of fatal accidents per million kilometres driven is relatively small, the red fatal accidents line on Figure 17.4 appears flat. The declining rate of fatal accidents has therefore been separately displayed on Figure 17.5.

Ontario and Canada fare reasonably well in a comparison of fatal accident rates, as can be seen from Figure 17.6.

Table 17.1 below sets out Ontario fatality rates between 1931 and 1986. In 1931, 10.2 people were killed per 100 million kilometres driven;[7] by 1950 the death rate had declined to 5.3; and in 1986 1.6 persons were killed per 100 million kilometres driven.

TABLE 17.1

ONTARIO FATALITY RATES 1931 - 1986

1931	10.2
1940	8.6
1950	5.3
1960	4.2
1970	3.2
1980	2.1
1986	1.6

I will deal later with the identification of those involved in motor vehicle accidents. That issue, as related to the effect of age and sex in particular, is considered in Chapters 6 and 7 dealing with the classification system and premiums.

---

[7] For road and traffic safety analysis purposes the incidence of motor vehicle accidents is usually measured by the number of accidents per 100 million kilometres driven.

C. MOTOR VEHICLE ACCIDENT PREVENTION AND TRAFFIC SAFETY

A preoccupation with the frequency and severity of accidents, driver behaviour, the cost of insurance, and compensation systems has tended to relegate accident prevention almost to a point of irrelevance. The frequency of motor vehicle accidents has caused us to become somewhat anaesthetized to their often tragic consequences. The frequency and severity of motor vehicle accidents can be ameliorated by appropriate accident prevention and traffic safety measures.

In Ontario, traffic safety is divided among a number of ministries: Transportation and Communications, the Attorney General, Education, and Health. In May 1976, the Ontario Government established the Select Committee on Highway Safety. In September 1977, that Committee tabled its report. One of the Committee's recommendations was to appoint a provincial highway safety coordinator. This was accomplished by giving additional duties to the Registrar of Motor Vehicles. The Registrar of Motor Vehicles is also the Assistant Deputy Minister of Safety and Regulation. As a result, the Safety Coordination and Development Office was created.

Between 1977 and 1981 a number of projects were undertaken. I will make brief reference to some of these projects. In 1977 through the Ministry of Health, a joint ministry program studied the cost of injuries resulting from motor vehicle accidents; in 1978, a task force established through the office of the Attorney General undertook a study of drinking and driving and a study on the efficiency of the breathalyzer laws. Other task force projects included studies of seat belt and general safety benefits. The task force often operated in a loose affiliation with other ministries having traffic safety concerns and responsibilities. In February 1981, the Ontario Government established a committee, chaired by the Attorney General, to develop a plan for "Safety In The 80's". In 1982, the committee, for all practical purposes, was disbanded. It was replaced by a special task force given a mandate to study drinking and driving.

In April 1985 the Registrar of Motor Vehicles recommended coordination of traffic safety programs. Although meetings were scheduled it does not appear that anything changed. As matters now stand, no one ministry or inter-ministerial committee has primary responsibility for road and traffic safety. A commendable degree of coordination exists in the area of countermeasures undertaken to combat drinking and driving. Other potential accident prevention and traffic safety measures seem to have a much lower priority.

Because responsibility for motor vehicle accident prevention has not been placed with any one ministry having the responsibility of coordinating traffic safety measures, a patchwork approach to accident prevention has emerged. Funding is of course a problem. Resources are scarce. All departments involved in traffic safety compete for funding. There is an attractively simple logic to the notion that traffic safety would be better organized if responsibility for it were unified, with one budget which could be allocated between various activities designed to reduce motor vehicle accident fatalities and injuries.

(a) Traffic Safety Research

When considering accident prevention, insurers tend to focus on the singular issue of driver behaviour. Those involved in the field of traffic safety and accident prevention have broadened their horizons somewhat. The literature indicates that a change occurred in the mid-1960s when traffic safety experts came to view accidents and their prevention as something which required consideration of more than driver behaviour. Motor vehicle accidents were increasingly regarded as the consequence of the interaction of three general variables: the driver, the vehicle and the environment. Traffic safety scholars assess accident prevention from a three-phased perspective. First, there is the pre-accident or pre-event phase where in theory an accident can be prevented altogether. Second, there is the event phase, in which it is possible to lessen the injury resulting from an accident. Third, there is the post-accident phase where unreasonable and unnecessary consequences, financial and otherwise, can be avoided.[8]

While traffic safety experts are virtually unanimous in concluding that more than driver behaviour must be taken into account from an accident prevention standpoint, no one suggests that driver behaviour should be ignored.

---

[8] W. Haddon and S.P. Baker, "Injury Control" in Preventive and Community Medicine/eds. D.W. Clark and B. MacMahon (Boston: Little, Brown, 1981).

Vehicle design, road design and driver behaviour all need to be considered.

(b) Vehicle Design

Until Ralph Nader's book, Unsafe At Any Speed[9], made vehicle design a political hot potato, the vehicle design issue remained in a state of dormancy. This was not so much because of the silence of traffic safety experts and scholars, but because no one seemed to listen to them. In 1956, the Ford Motor Company offered an optional safety package on new models; although 43% of Ford's customers chose to purchase vehicles with the Ford safety package, it was abandoned the following year. Some have suggested that pressure from other automobile manufacturers led to this decision.[10] A few years later the president of General Motors rejected the concept of a safety package, such as the one Ford had introduced in 1956 "until a very high proportion of the customers select the item or there are compelling reasons for standard installation".[11] In the end, neither Ford, General Motors nor Chrysler offered factory-installed safety features as an optional package after Ford's commendable effort in 1956. What the consumer would have chosen to purchase is therefore a matter of pure speculation.

---

[9] R. Nader, Unsafe At Any Speed: The Design-in Dangers of the American Automobile (New York: Grossman, 1965).

[10] J. Claybrook and D. Bollier, "The Hidden Benefits of Regulation: Disclosing the Auto Safety Pay-off," Yale J. of Regulation 3 (1985): 87-131.

[11] Claybrook and Bollier.

Certain facts are beyond dispute. In the late 1960s and the early 1970s there was an explosion of safety literature dealing with design-related issues. At about the same time, there was an increase in the intensity of the debate over vehicle design. Whether research sparked the debate, or the debate sparked the research, is no longer important. Although estimates vary as to the percentage of injuries prevented as a result of vehicle design improvements, the evidence is clear that research in this area has been enormously valuable.[12]

After the publication of Unsafe At Any Speed in 1965, the United States Government Operations Committee and the Senate Commerce Committee held public hearings which resulted in the establishment of the National Highway Safety Bureau. This later became the National Highway Traffic Safety Administration (NHTSA). The National Traffic Motor Vehicle and Safety Act was passed in the United States in 1966. In 1967, NHTSA issued 19 vehicle safety standards. Many think that these standards led to a new era in traffic safety. These American standards have served as a model for many countries, including Britain, West Germany, France, Australia and Canada.[13]

---

[12] Friedland, Trebilcock and Roach, Regulating Traffic Safety; Robert W. Crandall et al.; Regulating the Automobile (Washington, D.C.: Brookings Institution, 1986); U.S. General Accounting Office, Effectiveness, Benefits and Costs of Federal Safety Standards for Protection of Passenger Car Occupants (Washington, D.C.: N.H.T.S.A., Dept. of Transportation, 1976).--(E.D. 76-121 G.A.O. 1976).

[13] The Motor Vehicle Safety Act 1970.

There were, of course, dissenters. Using a mathematical model and data from 1944 to 1972, Professor Samuel Peltzman[14] hypothesized that the NHTSA safety regulations were not responsible for the existing decline in accident frequency and severity. Peltzman's central premise was that drivers equipped with safer vehicles take more risks with the result that accident involvement remains static. Groups opposing government intervention (or promoting freedom of choice) assembled under the Peltzman banner. At times the debate became more ideological than empirical. The spillover into Canada was limited.

A recent study, which appears both extensive and methodologically sound, concluded that the 1967 regulations previously referred to resulted in a 30% reduction in fatalities. Assuming this estimate is correct, the 1967 U.S. regulations adopted in Canada in 1971 may have saved 472 lives in Ontario in 1986.[15]

The vehicle safety regulation debate continues. Each new technological development leads to two central questions. First, will the technological development reduce accidents and costs (fatalities, bodily injuries, vehicle damage)? Second, if the answer to the first question is yes, is the investment required cost efficient? This second question requires ascribing an economic and social value to human life.

---

[14] S. Peltzman, "Effects of Automobile Safety Regulation," J. of Pol. Econ. (1975): 677-725.

[15] 1,102 people were killed in motor vehicle accidents in Ontario in 1986. If the 30% estimate is correct, there would have been 1,574 deaths in Ontario without the safety regulations.

(c) Road Design

It is now recognized that making driving safer can be achieved by making the roadways themselves safer. The research is prolific; it is not possible here to begin to outline what is known about highway design and traffic safety. I propose to restrict my comments to some of the general concerns in this area.

The traffic engineer is often faced with a dilemma. Safety and mobility often conflict. Value judgments have to be made. For example, four-way stops, although safer than two-way stops,[16] slow down traffic. Safety considerations must be taken into account in road construction and on an ongoing basis, so that existing potential danger areas can be identified before, not after, tragedies occur.

(d) Driver Behaviour

There are countless aspects of driver behaviour which are taken into account in traffic safety literature. I will restrict my comments to issues of speed, restraint systems and drinking and driving.

---

[16] E. Hauer, Review of Published Evidence on the Safety Effect of Conversion from Two-way to Four-way Stop Sign Control, (Toronto: University of Toronto, Dept. of Civil Engineering, 1985). - (Publication # '85-02).

(i) Speed Limits

There is no doubt that speed influences both the severity and frequency of motor vehicle accidents. The connection between speed and accident severity is both simplistic and obvious. The greater the speed upon impact, the larger the force of impact and consequently, the greater the injury, all else being equal. Speed also affects accident frequency. As speed increases, response time decreases. Increased speed tends to establish increased variation in travel speed from that of the surrounding traffic flow. In this area it is not absolute speed which is the issue, but rather the variation in speed between a subject vehicle and other traffic.[17] Absolute speed and variations in vehicular speed are therefore significant. This raises the issue of maximum and minimum speed limits.

A Ministry of Transportation and Communications study undertaken by J.A. Pierce[18] in 1977 evaluated the safety benefits from the reduction of speed limits in Ontario in 1976. At that time speed limits on major divided highways were reduced from 70 miles per hour (112.6 kilometres per hour) to 60 miles per hour (96.5 kilometres per hour), and on undivided highways from 60 miles per hour to 50 miles per hour (80 kilometres per hour). The Pierce study found that the speed limit reduction resulted in a positive, if unquantifiable, safety benefit. Pierce concluded that it was impossible to separate the influence of new speed limits in Ontario from benefits accruing from the simultaneous introduction of mandatory seat belt legislation. Thus, in Ontario, as in New Zealand (where speed limit reductions were imposed along with seat belt legislation and no fault insurance) and the United States (where speed limit reductions were imposed at a time when road use declined due to the oil crisis), conclusions about the extent of life-saving benefits of reduced speed limits remain somewhat speculative. In a field where disagreement is the norm, the conclusion that speed limit reduction will beneficially affect accident frequency and severity, is close to unanimous. The debate is over the extent, not the existence, of the benefit derived from reduced speed limits.

---

[17] See particularly, National Research Council. Transportation Research Board, 55: A Decade of Experience (Washington, D.C.: National Research Council, 1984).--(Special Report #204).

[18] J.A. Pierce, "Safety Benefits of the Seat Belt Legislation and Speed Limit Reduction in Ontario," in Proceedings of the 23rd Annual Conference of the American Association of Automotive Medicine (Illinois: A.A.A.M., 1977).

Some impressive research has demonstrated that the important link between speed and accident risk is not based exclusively upon the absolute vehicle speed, but also on vehicle speed in relation to the surrounding traffic flow.[19] Variability in vehicle speeds results in more passing as faster drivers overtake slower moving cars. As each passing event occurs, there is an increased risk of collision for both the passing and the passed vehicles. If, as some suggest, it is correct that the lowest accident frequencies occur not at the lowest speeds, but at the median speed, then travelling at the median speed should place a driver in the best statistical risk position. Travelling at above or below the median speed increases the driver's risk of accident involvement. Thus, while speed reduction is important to safety from the standpoint of both accident frequency and severity, speed control, consisting of reducing high speeds and increasing low speeds to close the speed variation gap, may be equally important. In this respect, minimum speed limits and their enforcement may well be as important as establishing and enforcing the maximum speed at which vehicles can be driven.

---

[19] See National Research Council. Transportation Research Board, 55: A Decade of Experience, 1984 and especially E. Hauer, "Accidents, Overtaking and Speed Control," Acc. Anal. and Prev. 3 (1971): 1-13.

(ii) Restraint Systems

In an accident where there is bodily injury there are two separate collisions. The first involves the contact between the vehicle and some other object, often another vehicle; the second collision occurs when the driver or passenger hits some surface within the vehicle, or if propelled out of the vehicle, the road. Restraint systems are designed to avoid or at least limit this second collision. For present purposes I refer only to seat belts and child restraints.

Studies on the efficacy of seat belts have been undertaken since seat belts were first used by pilots after World War I. Surprisingly, it was not until 1964 in the United States, and 1972 in Canada, that simple lap belts became mandatory equipment on new cars. That seat belts save lives and reduce injuries is beyond argument. There will, of course, always be those who deal with seat belts in a negative and anecdotal way; all have heard stories of the driver trapped in his car by a seat belt that could not be unhooked. These "man-bites-dog" stories should not be allowed to obscure the overwhelming evidence as to the value of seat belts.

It was originally estimated that seat belts would result in a 40 to 50% reduction in serious injuries and fatalities.[20] Reductions have occurred, but predictions have not been met. When Ontario made seat belt use mandatory in 1976, the fatality/injury rate did not drop by 40 to 50%. Not everyone buckled up; those who chose not to tended to be high risk drivers, more likely to be involved in accidents in the first place. Moreover, some suggest that drivers who were forced to use seat belts increased risk-taking in other areas, thus tending to stabilize accident rates on a before-and-after seat belt law assessment basis.

Although the benefits of seat belt laws are difficult to quantify because of the influence of other variables such as reduced speed limits, most experts in the field of traffic safety and accident prevention agree that the use of seat belts has had a beneficial effect on accident severity.[21]

There is no doubt as to the value of using child restraints. Because the skulls of small children are softer than those of adults and constitute a proportionally larger part of body area, a young child's capacity for injury on secondary contact within the vehicle is greater than that of an adult. Furthermore, U.S. figures show that 11% of children under 14 who are treated in emergency rooms are injured either while riding in a car that has swerved or stopped, rather than crashed, or injured as a result of a fall from the opened door of a stationary vehicle. Potential reductions in injuries and fatalities attributable to child restraints have been estimated at 80%.[22] The actual results have been less significant, mainly because of non-use and misuse of child restraints.

---

[20] J. Hedlund, "Recent U.S. Fatality Trends," in Human Behavior and Traffic Safety/eds. L. Evans and R.C. Schwing (New York: Plenum, 1985).

[21] See for example, O.E.C.D., Symposium on Occupant Restraints (Paris: 1985); University of Toronto, Human Collision: International Symposium on Occupant Restraint (Toronto: 1981).

The benefits of child restraints are so demonstrably clear that there is little reason to justify children sitting loose in a car, or on the lap of an adult in the passenger seat. Child restraints are readily available; in many areas they can be obtained on loan. Child restraint loan programs were pioneered in New Zealand and are now widespread in Canada. Educating parents through information provided in hospitals and in doctors' offices concerning child restraints as is done now makes sense to me. Furthermore, I think we should consider what is done in some American jurisdictions when a parent is charged with an offence related to the failure to use a child restraint. The parent is given a choice of paying the fine or establishing to the court that a child restraint has been purchased, rented or borrowed.

---

[22] Hall et al., The Use of Telephone Interviews to Verify the Reliability of Police Accident Reports in Assessing the Effectiveness of Child Safety Seats (Chapel Hill: Highway Safety Research Centre, Univ. of North Carolina at Chapel Hill, 1984).

(iii) Drinking and Driving

Prior to 1969 a charge of impaired driving or driving while intoxicated required a subjective judgment concerning the driver's condition. There was no accepted objective method of determining what constituted a condition of impairment or intoxication. Although blood alcohol test results were admissible as evidence, they were neither required nor was the fact of a refusal to take a test admissible.

In 1969 the Criminal Code was amended. The offence of driving while intoxicated was removed from the Code. Driving while impaired remained. A new offence was introduced, that being driving with a blood alcohol level of over 80 milligrams of alcohol per 100 millilitres of blood (.08). At the same time the offence of refusing to provide a breath sample was created. Impaired driving, driving with a breathalyzer reading in excess of .08 and the refusal to take a breathalyzer test carry the same penalties.

Police are now authorized to conduct roadside breathalyzer tests, not only on reasonable and probable grounds that the driver is impaired, but also on reasonable and probable grounds that the driver has a blood alcohol reading of more than .08.

It is clear that drinking and driving is no longer socially acceptable. The development of this response has been slow; however, its manifestations are increasingly visible. What is not as clear is how this additional change has occurred. Some argue that increased penalties and enforcement are the causal factors; others suggest that society's recently adopted abhorrence of impaired driving has led to increased penalties and more zealous enforcement.

As Dr. White has pointed out in his Inquiry research paper, changes in social attitudes do not occur overnight; the gestation period is lengthy. Changes in attitudes related to drinking and driving do not come about in isolation or in singular response to increased penalties; dissemination of relevant information is required. Recently, a British Columbia project of spot checks to control drinking and driving was undertaken. The program was accompanied by a wide publicity campaign in all major communities but one. In that one community there happened to be a newspaper strike. Alcohol-related accidents decreased in all communities except the community in which there had been no publicity.[23] It would appear that public education and publicity are an effective and essential operating force in molding social attitudes as to what is acceptable behaviour, and in the final analysis, modifying behaviour.

Rehabilitation programs seem to be of benefit in modifying the behaviour of social drinkers, but not problem drinkers. Education and publicity programs may succeed in informing but not, in isolation, modifying behaviour.[24] Most of those convicted of impaired driving have sufficient information; what they do not have is the willingness or, in some cases, the capacity to modify their behaviour.

---

[23] Friedland, Trebilcock and Roach, Regulating Traffic Safety.

[24] Friedland, Trebilcock and Roach.

Licence suspensions deter in both a specific and general way. At the specific level, deterrence works in three ways. First, an accused whose licence has been suspended for a drinking and driving charge is said to be less likely to drink and drive in the future. Second, in the short run, the accused (it is hoped) will not drive during the suspension period. Third, if the accused does drive, he will tend to drive more carefully for fear of being caught.

At the general level, licence suspensions for drinking and driving are said to deter others from similar activity. There is no doubt that the exposure to a licence suspension, now one year for a first conviction in the impaired driving family of offences,[25] has acted as a general deterrent. The motorist's response to the certainty of a minimum one-year licence suspension following an impaired driving conviction is quite different from the motorist's response to traffic violations (for example, convictions for breaches of the Highway Traffic Act's Rules of the Road). As Dr. White observes, breaches of the rules of the road tend to be viewed by motorists simply as a cost of mobility; that kind of offence is not regarded as morally culpable either on an individual or on a community basis.[26] In my opinion, increasing the flow of information as to the imposition of the suspension on drinking and driving convictions, more than the probable fine or even the potential of imprisonment, would be productive.

---

[25] See Appendix V.

[26] See Inquiry Research Study V.

It seems to me that there is no single control device which has a significant influence on either behaviour or accident rates as related to drinking and driving. Friedland, Trebilcock and Roach, in their recent study, Regulating Traffic Safety: A Survey of the Effectiveness of Control Strategies, conclude that drinking and driving can best be controlled with a comprehensive approach involving multiple accepted methods, such as, education, publicity, licence suspensions, increased penalties and enforcement. While certain scholars disagree, the comprehensive approach outlined above makes sense to me. The authors caution that ongoing evaluation is crucial.

Some of those making submissions to this Inquiry have suggested increasing the drinking or driving age, or both. The most common proposal is that the drinking and driving ages be increased to 21. In dealing with these issues from the traffic safety standpoint, I think it is important that the drinking age and the driving age be separated. If the drinking and driving ages are coincident, the roads will be partly occupied by those who have neither learned to drink nor drive. At the moment, there is a three-year difference between the drinking and the driving age. Raising the drinking age to 21 would increase the gap to five years, but it would not improve the documented inferior risk perception capacity of young drivers;[27] nor would it eliminate the need to deal eventually with combining the two forms of activity, drinking and driving, in a responsible and safe way. I have not examined sufficient evidence to make recommendations as to increasing either the drinking age or the driving age. From a traffic safety standpoint, I recommend only that both the drinking and driving ages be given further study.

---

[27] P. Finn and B.W.E. Bragg, "Perception of the Risk of an Accident by Young and Older Drivers," Acc. Anal. and Prev. 18, No. 4 (1986): 289.

One of the difficulties with the driving age itself is that of inexperience. A young driver, almost by definition, has little or no driving experience, except that gained through driver education or through whatever training is undertaken in preparation for the individual's acquisition of a driver's licence. Dr. White[28] has noted that the young driver's "cognitive set" is established well before the young driver is licensed. It would be sensible for young people undertaking driver training to be given driver education at a much younger age, and not as part of a crash course leading to the acquisition of a driver's licence. Establishing in a young would-be driver what is acceptable social behaviour may be difficult in some instances, but not impossible.

I conclude this chapter by emphasizing that we must devote adequate resources to accident prevention. As Professor Gaudry has observed,[29] even minor statistical positive changes in injury and fatality rates will translate into fewer lives lost and fewer injuries sustained. What should not be forgotten is that advances in traffic safety do not have to be revolutionary in the statistical sense to be legitimately viewed as worthwhile.

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[28] See Inquiry Research Study V.

[29] Inquiry Compensation Conference, May 15, 1987, Toronto.

Volume

2

Report of Inquiry into Motor Vehicle Accident Compensation in Ontario

The Honourable Mr. Justice
Coulter A. Osborne
Supreme Court of Ontario
Commissioner

Volume II
Research Studies
and
Volume I Appendices

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THE EFFECTS ON ROAD SAFETY OF THE COMPULSORY INSURANCE, FLAT PREMIUM RATING AND NO-FAULT FEATURES OF THE 1978 QUEBEC AUTOMOBILE ACT

Prepared for the Inquiry Into Motor Vehicle
Accident Compensation in Ontario

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1. INTRODUCTION

In this paper, we review the evidence concerning the various effects on road safety of the new automobile insurance régime introduced in the Province of Quebec on March 1, 1978, and discuss their significance with particular reference to the modified driver care levels associated with the compulsory insurance, flat premium rating and no-fault features of the new law. We present a visual analysis of the main data and summarize the results of a statistical analysis of these data made with the DRAG model of the Demand for Road use, Accidents and their Gravity. To establish the significance of the statistical results, we provide corroborating evidence on the modified risk composition of the stock of drivers.

2. EVIDENCE

The new Quebec law came into force on March 1, 1978. Primary evidence of its effects on road safety consists of claims against insurance companies and of police reports on accidents of various categories and on the number of victims. Claims against insurance companies are recorded on the basis of the policy year, which starts on July 1 and ends on June 30 of the following year; police reports are available on a monthly basis.

Claims Against Automobile Insurance Companies

One can see in Table 1 (page 5) that between 1977 and 1978, claim frequency per insured pleasure vehicle increased 20.1%, a number that almost certainly underestimates the true value because the policy year 1977 includes 4 months of data under the new régime. Under the specific heading of third party liability that had been made compulsory by the new law, claims per insured vehicle increased 41.3% in Quebec during the same period, as compared to a 2.9% increase in frequency in the rest of Canada. Although some of the increase might have been caused by the fact that the 15% of vehicles not previously insured might have differed somewhat from the rest of the vehicles and included an unusual proportion of high-risk drivers, the huge increase in the average claim frequency constitutes *prima facie* evidence of an important increase in accidents.

TABLE 1

Claims Against Automobile Insurance Companies, Quebec 1973-1984

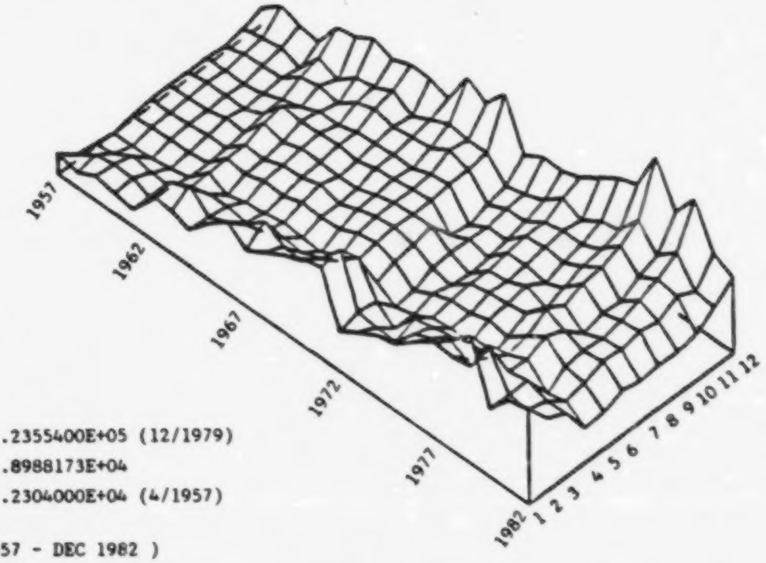
(Claims per 100 insured private automobiles (farmers included))

Policy Year	73	74	75	76	77	78	79	80	81	82	83	8
A. Overall Claim Frequency:	28.7	29.2	28.4	25.5	23.4	28.1	31.8	33.2	33.0	26.7	26.5	28
B. Third Party Liability:												
Quebec	10.6	10.6	9.8	8.6	7.5	10.6	12.1	12.0	11.8	9.3	9.1	9
Rest of Canada	n.a	8.5	7.8	7.1	6.9	7.1	6.9	6.7	6.7	6.0	5.4	5
Difference	—	2.1	2.0	1.5	0.6	3.5	5.2	5.3	5.1	3.3	3.7	4

Source: Table 3.1, Table 3.2 and Table 3.B in [1].

Accidents and Road Victims

An even stronger increase occurs in the official monthly data on accidents and road victims when the values for the twelve months before March 1, 1978, are compared to the values during the first twelve months of the new regime: the total number of accidents increased by 26.9%[1] and the number of victims by 29.7%. Moreover, all the components of these two totals increased significantly. As shown on Graph MA, (page 6) accidents with material damages only reported to the police and involving estimated damages greater than a certain criterion value increased by 26.3% despite the fact that the criterion was increased from $200 and $250 in 1978; accidents with at least one injury (no deaths) increased by 31.8% and fatal accidents increased by 7.0%. In these accidents with bodily damages, the number of injuries shown on Graph HT (page 7) increased by 30.6% and the number of fatalities shown on Graph DE (page 8) increased by 6.4%.



MA

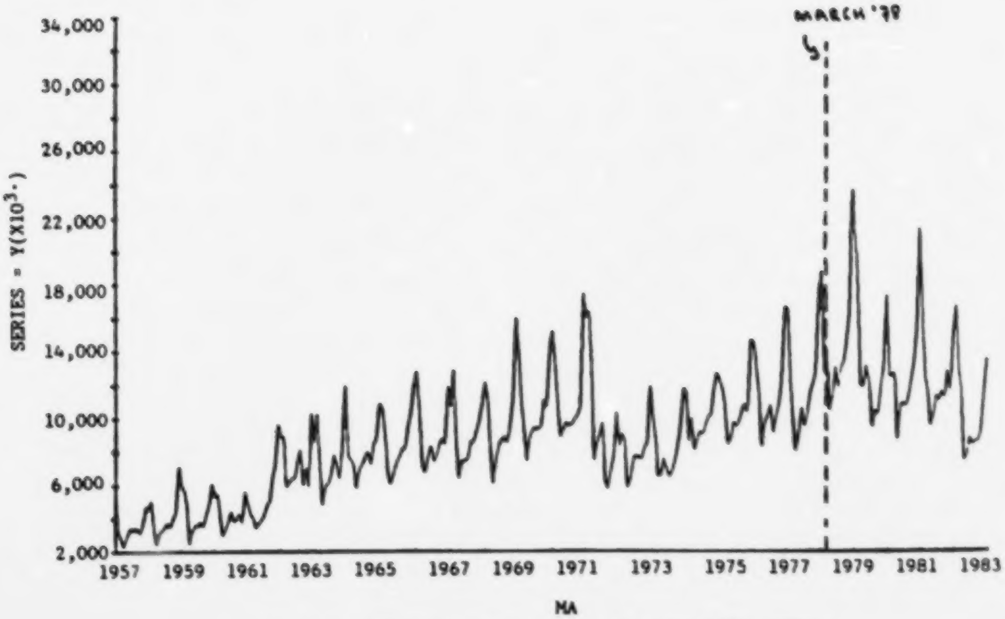
MAX = .2355400E+05 (12/1979)

M(Y) = .8988173E+04

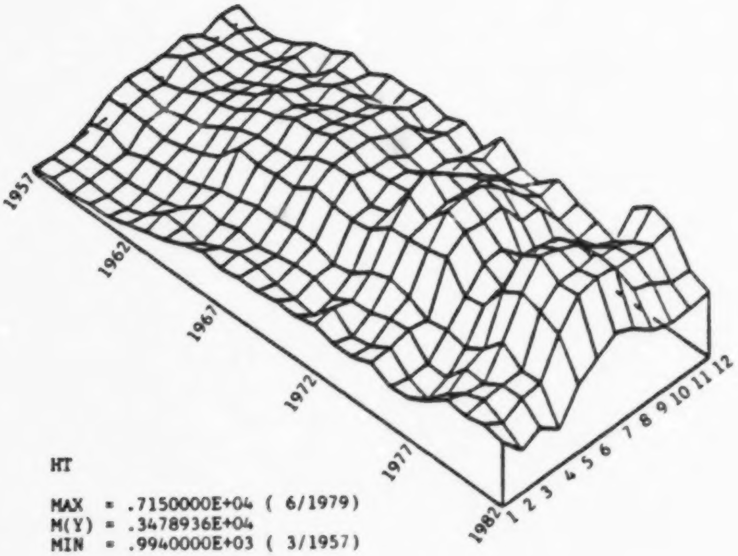
MIN = .2304000E+04 (4/1957)

(JAN 1957 - DEC 1982)

NUMBER OF ACCIDENTS WITH MATERIAL DAMAGES ONLY. QUEBEC



NUMBER OF ACCIDENTS WITH MATERIAL DAMAGES ONLY, QUEBEC
(JAN 1957 - DEC 1982)

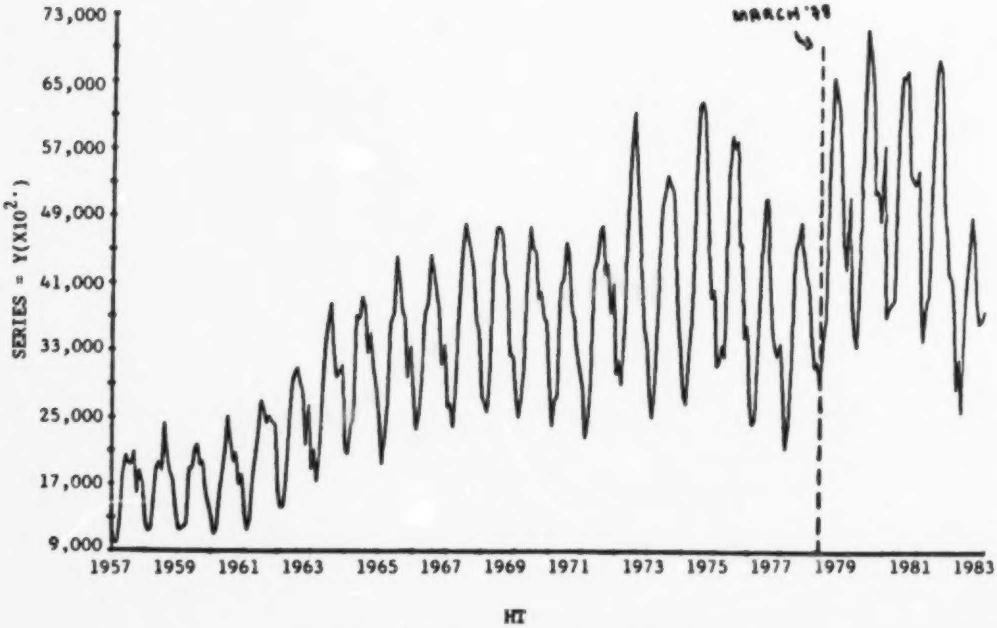


HT

MAX = .7150000E+04 (6/1979)
M(Y) = .3478936E+04
MIN = .9940000E+03 (3/1957)

(JAN 1957 - DEC 1982)

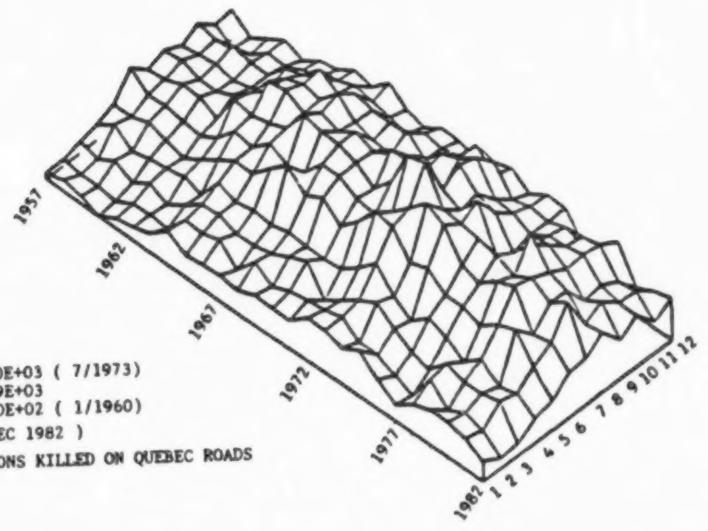
NUMBER OF PERSONS HURT ON QUEBEC ROADS



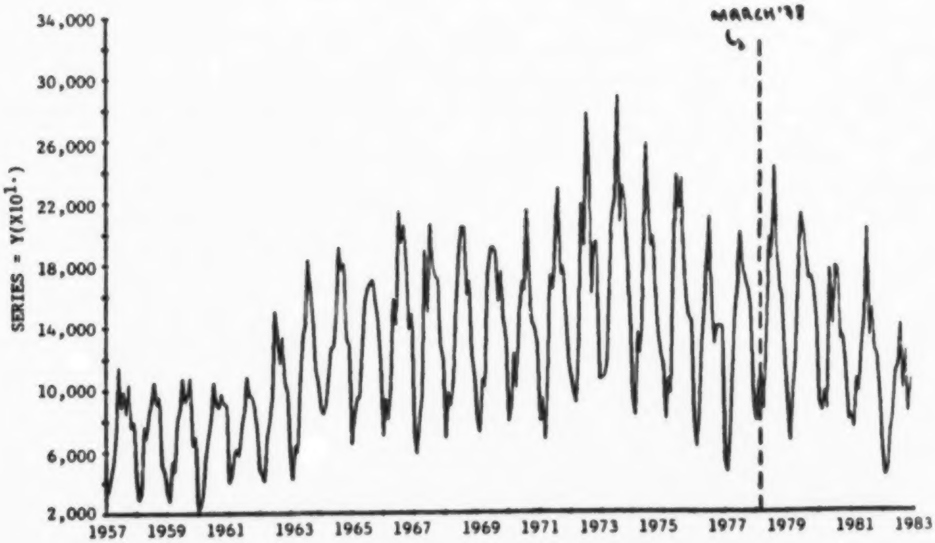
HT

NUMBER OF PERSONS HURT ON QUEBEC ROADS

(JAN 1957 - DEC 1982)



DE
MAX = .2880000E+03 (7/1973)
M(Y) = .1238179E+03
MIN = .2100000E+02 (1/1960)
(JAN 1957 - DEC 1982)
NUMBER OF PERSONS KILLED ON QUEBEC ROADS



DE
NUMBER OF PERSONS KILLED ON QUEBEC ROADS
(JAN 1957 - DEC 1982)

We now describe shortly the features of the 1978 Act; we then summarize and interpret the results of a statistical study that estimates its effects.

3. THE 1978 QUEBEC AUTOMOBILE ACT

Main Characteristics For Our Purposes

The Act split the previous accident insurance system as follows:

Bodily Damages: It removed the notion of fault for corporal damages (injuries or fatalities) and established a basic compulsory public plan financed jointly from general revenues[2] and from a uniform premium system (for given classes of vehicles) independent from an individual's risk class and safety record. It introduced a centralized compensation system that generally increased greatly with speed, frequency and size of compensation[1]. This:

A. reduced the average premium[3] for corporal damages, and the total premium [2], a price change that would reduce driver care;

B. increased the total number of drivers through both the lower average premium and the important further relative price reduction for individuals belonging to the worst risk classes (as their demand for driving licences was probably more elastic than the demand of those whose faced a relative price rise);

C. lowered the average quality and motivation to safety of the stock of drivers because of the sudden subsidy given to relatively risky drivers and the suppression of the notion of fault for all drivers; and

D. encouraged individuals to classify as accidents with injuries accidents previously declared as accidents with material damages only, because of the more favourable compensation system.

Material Damages: It maintained the notion of fault for material damages, but made civil liability insurance for them compulsory. It introduced mechanisms for the direct and fast payment of indemnities by the private insurers. This:

E. raised the price of keeping a car for the 14-18% pleasure vehicle owners not previously insured, thus reducing the number of cars;

F. reduced the motivation to prudence of these newly insured owners; and

G. increased slightly the incentive to report to the police and to insurers minor accidents (with material damages only), because of faster compensation.

Representation of These Changes For Modeling Purposes

In the DRAG model that we built [3,4] to explain the number of accidents and the number of victims, there are two ways of measuring the impact of these changes.

Changes such as (A) on the average level of automobile insurance prices, (B) on the total number of licensed drivers and (E) on the level of car ownership occur through three variables describing respectively the cost of maintaining a car, the number of licensed drivers per car and the number of cars per person. DRAG results suggest that the effects on road safety caused by CHANGED LEVELS OF THESE THREE QUANTITATIVE FACTORS are not negligible but are difficult to be precise about. Moreover, the variations brought about by the new Act may have been qualitatively different from previous variations.

Some modifications in the qualitative significance of price, in the tenure of driving licences, or in the quality of the stock cars, are captured by a qualitative "dummy" variable that also simultaneously measures the effect of other clearly QUALITATIVE changes (C) and (F) in the quality of drivers and driving. DRAG results show that the net effect of the qualitative changes are very important and that the new *Act* clearly increased all categories of accidents and victims, but the exact value of the increase cannot always be ascertained exactly because some of the estimates may sometimes be tainted by the presence of declaration effects (D) and (G).

Let us now present the basic idea of the model in order to understand our estimates of the effects of both quantitative and qualitative factors.

4. MEASURING STRUCTURAL CHANGE WITH THE DRAG MODEL

Basic Idea and Specification: Direct and Indirect Effects

The basic idea of the DRAG model is to explain the number of road accident victims, VI, by studying together the mechanism that determines the demand for road use, DR, and the mechanism that determines the road safety performance record. In the first mechanism, road use (exposure) is measured by motor vehicle fuel sales and explained by a set of factors, X^{dr}. The second mechanism is itself decomposed into an explanation of the number of accidents, AC, and an explanation of their severity, GR; both are explained by road use, DR, and the factors, X^{vi}. The product of the number of accidents and their severity yields the number of victims. This can be written symbolically as:

Motor Vehicle Fuel Sales	DR <--- (, X^{dr})	°Demand
Accidents	AC <--- (DR , X^{vi})	
Severity (victims per accident)	GR <--- (DR , X^{vi})	°Performance
Victims	VI <--- AC x GR	

The advantage of adding a demand level to a performance level sometimes studied alone by other authors is that one can obtain estimates of the "total" impact of various factors that explain both road use and performance (i.e., that appear in both X^{dr} and X^{vi}) by tracing their influence on the number of accidents or victims through changes in road use in addition to their effects on performance for a given level of road use. For instance, snow certainly has a direct impact on accidents or their severity at any level of road use but it also has an indirect effect through its influence on the amount of driving. The same will be the case below for the new automobile insurance régime.

The advantage of analyzing the number of victims through a distinction between the explanation of accidents and the explanation of their severity, instead of immediately explaining the number of victims, is real: one gains information by finding out whether the explanatory factors considered have the same influence on the frequency of accidents and on their severity.

We are here concerned with the application of this model structure to Quebec: all variables are defined for the Province of Quebec as a whole for the 313 consecutive months from December 1956 until December 1982. Much of the new econometric methodology applied in DRAG is also described and tested in other technical reports [5,6].

Explanatory factors used in the various equations belong to seven major categories: the level and composition of the DEMAND FOR ROAD USE and of PRICES, the availability and characteristics of MOTOR VEHICLES, the state of TRANSPORTATION NETWORKS (described by traffic laws and police patrol, the service levels of the travel modes, and road infrastructure properties including the weather), CONSUMER CHARACTERISTICS of a general and of a specific nature (linked to age, sex and vigilance), the level and composition of final and intermediate ECONOMIC ACTIVITIES and trip purposes, and accounting or ADMINISTRATIVE measurement practices. The very long time series used make it possible to test the influence of a large number of explanatory variables but here we will only single out model features related to the quantitative and qualitative changes associated with the 1978 Quebec Automobile Insurance Act.

Effects of Three Quantitative Factors

One finds in Table 2 (page 13) the elasticities of selected dependent variables of the model with respect to the three explanatory variables affected by the 1978 Act. These elasticities are defined as the ratio of the percentage change of each explained variable with respect to the percentage change of the explanatory variable considered and are evaluated at the mean value of the sample.

Increases of the real price of maintaining a car, defined as the maintenance and insurance price (excluding any fuel and depreciation components), are associated with

TABLE 2

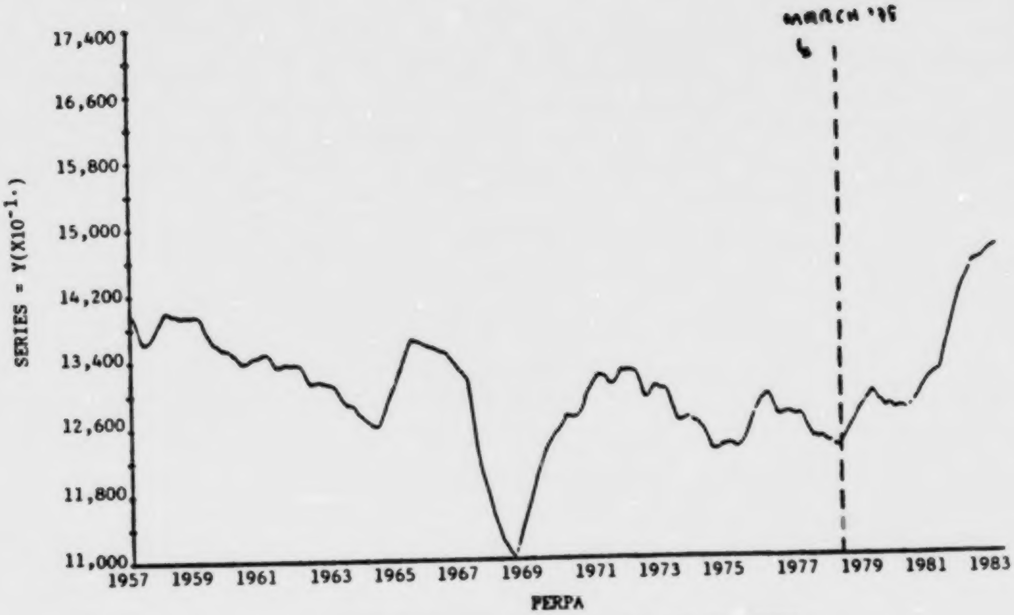
Elasticities of Quantitative Factors Modified By 1978 Automobile Insurance Act

	Price of Maintaining a Car			Number of Licensed Drivers Per Car			Number of Cars Per Person		
	Direct	Ind.	Total	Direct	Ind.	Total	Direct	Ind.	Total
Dependent Variable	(t-st.)			(t-st.)			(t-st.)		
ROAD USE									
::: Gasoline Sales	0.205 (1.96)			0.073 (0.40)			0.269 (1.32)		
::: Diesel Sales	0.273 (0.68)								
ACCIDENTS with									
(1) Property damage only	-0.629 (-3.03)	0.193	N	-0.371 (-1.78)	0.064	-.307		0.234	
(2) At least one injury, no deaths	-0.728 (-3.97)	0.107	N	-0.089 (-0.47)	0.035	-.054		0.130	
(3) At least one death	-1.01 (-3.90)	0.133	N	-0.604 (-1.95)	0.043	-.561		0.158	
(2)+(3) Bodily damage	-0.740 (-3.77)	0.108	N	-0.060 (-0.64)	0.036	-.024		0.131	
(1)+(2)+(3) Total accidents	-0.653 (-3.91)	0.174	N	-0.303 (-2.22)	0.058	-.245		0.211	
SEVERITY									
...									
VICTIMS									
(4) Injuries	-0.797	0.118	N	-0.313	0.041	-.272		0.149	
(5) Fatalities	-1.018	0.258	N	0.257	0.091	.348		0.333	
(4)+(5) Total victims	-0.840	0.123	N	-0.293	0.042	-.251		0.155	

Direct: Holds road use constant.
Indirect: Allows for variation in road use.
Total: Direct + indirect, unless the sum is not relevant (indicated by N).
Reference Model: Found in [3].
t-statistics of underlying regression coefficients shown in parentheses are computed conditionally upon the estimated functional form of the regression equations and differ from the unconditional values presented in [3].

increased consumption of fuels and significant reductions in the number of accidents (and of their severity, but these results are not shown). This suggests that higher maintenance prices reduce engine tune-ups, causing higher fuel consumption, and reduce general maintenance, stimulating driver care and lower speed adjustments that reduce accidents and their severity. Lefebvre and Fluet have studied the evolution of the real price of insurance in Quebec and have estimated that the price of a dollar of compensation for material and bodily damages fell from \$1.69 to \$1.37 because of the Act [2, p. 48]. **If this 22% decrease is taken as the "best educated guess" of the price change,** the Quebec part of the national index used in the model fell by 8.54% and the index itself by approximately 2.15% (the structural change being absorbed by the qualitative variable).

Increases of the number of licensed drivers per car reduce the number of categories of accidents but, because of opposite effects on the severity of accidents with injuries and fatal accidents (results not shown), injuries decrease and fatalities increase: presumably, with fewer occupants per car, drivers increase speed (gasoline consumption increases slightly, but that may also be due to increased exposure). Visual analysis of Graph PERPA (page 15) shows an immediate increase of about 6% immediately after the implementation of the Act, followed by continuing increases. **This 6% increase is then a conservative "best educated guess" of the short-run effect of the new price structure,** perhaps half of which is due to the increased supply of drivers.



NUMBER OF DRIVERS' LICENCES PER CAR IN QUEBEC
(JAN 1957 - DEC 1982)

Increases of the number of cars per person increase road use and, indirectly, accidents and victims. One notices on Graph AUPPOP (page 17) the dramatic turn-around of car ownership in Quebec since the implementation of the Act. The first significant drop in car ownership ever seen -- about 3% -- is followed by a relatively slow recovery and a massive fall of ownership levels. The influence of extraordinarily high real gasoline prices after 1979 (they increased by 60% between 1979 and 1982), the exodus of households with higher than average car ownership levels and the recession of 1982 may all have contributed to breaking the trend. **The 3% drop during the first year of the Act is a "best educated guess" of the impact of forcing owners to have insurance** by requesting a proof of insurance for material damages and tying the registration fee to the payment of a premium for bodily damages: registering many (presumably old) cars became too expensive.

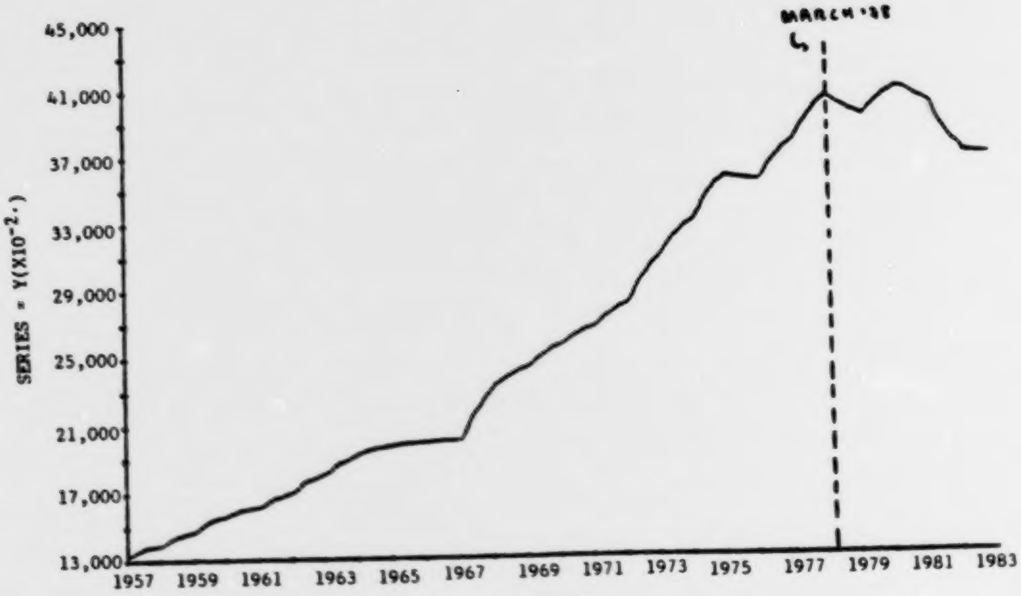
Effects of Qualitative and Structural Changes

Table 3 (page 18) shows the percentage variation of each dependent variable due to the qualitative change brought by the Act. These variations are computed at the mean value of the sample, i.e., for an "average point" rather than at the specific moment of implementation of the legislation.[4]

5. SIGNIFICANCE OF THE RESULTS

The Principal Effects of the 1978 Act

Table 4 (page 19) summarizes the main effects of the 1978 Act, estimated both visually and with the help of a combination of DRAG model results and educated guesses. Estimates based on the model are lower than the visual estimates: if model elasticities had been evaluated for the 12 months previous to the implementation of the Act, and not for the whole sample period, they would be somewhat lower (as indicated by the starred values). This being said, it is clear that, although it is difficult to be precise about the impact of the Act on the level of the three quantitative factors considered, most of the impact of the Act occurs through its qualitative or structural change: in Table 4 (page 19), adding up the first three columns yields -1.19%, -0.37% and 3.26%, or values that



AUPPOP
NUMBER OF CARS PER PERSON IN QUEBEC
(JAN 1957 - DEC 1982)

TABLE 3

Qualitative Effect of 1978 and 1961 Automobile Insurance Acts

	March 1978 Act			July 1961 Act					
	Reference Model			Reference Model			Model Variant		
	Direct	Ind.	Total	Direct	Ind.	Total	Direct	Ind.	Total
Dependent Variable		(t-st.)			(t-st.)				(t-st.)
ROAD use									
::: Gasoline Sales	2.6 (0.76)			3.4 (1.35)			3.5 (1.44)		
::: Diesel Sales	5.0 (0.42)			12.4 (1.56)			11.9 (1.44)		
ACCIDENTS with									
(1) Property damage only	8.5 (1.08)	2.5	11.0	24.9 (6.53)	3.6	28.5	26.5 (7.45)	3.9	30.4
(2) At least one injury, no deaths	26.3 (8.13)	1.4	27.7	13.1 (3.50)	2.0	15.1	15.2 (4.24)	2.2	17.4
(3) At least one death	3.3 (0.58)	1.7	5.0	-3.7 (-0.63)	2.6	-1.1	12.6 (1.86)	2.4	15.0
(2)+(3) Bodily damage	25.3 (7.18)	1.4	26.7	12.4 (3.14)	2.0	14.4	15.1 (3.81)	2.2	17.3
(1)+(2)+(3) Total Accidents	12.1 (2.39)	2.3	14.4	22.2 (6.76)	3.3	25.5	24.0 (7.71)	3.5	27.5
SEVERITY									
...									
VICTIMS									
(4) Injuries	24.8	1.5	26.3	5.9	2.1	8.0	10.1	2.3	12.4
(5) Fatalities	3.6	3.2	6.8	-9.1	4.4	-4.7	1.7	5.2	6.9
(4)+(5) Total Victims	24.0	1.6	25.6	5.4	2.2	7.6	9.9	2.4	12.3

Direct: Holds road use constant.
Indirect: Allows for variation in road use.
Total: Direct + Indirect
Reference Model: Found in [3].
Variant Model: Unpublished results with driver quality risk index.
t-statistics of underlying regression coefficients shown in parentheses are computed conditionally upon the estimated functional form of the regression equations and differ from the unconditional values presented in [3].

TABLE 4

Main Effects of 1978 Automobile Insurance Act

	% change					
	Based on DRAG results and due to					VISUAL
Dependent Variable	Price of Maintaining a Car	Licensed Drivers Per Car	Cars Per Person	Qualitative Structural Change	Total	Total
ACCIDENTS with						
(1) Property damage only	1.34	-1.84	-0.70	11.00	9.81 7.43*	26.29
VICTIMS						
(4) Injuries	1.70	-1.63	-0.45	26.30	25.93 24.04*	30.58
(5) Fatalities	2.17	2.09	-1.00	6.80	10.06 9.12*	6.35

Values for the first three columns are obtained by multiplying respectively the direct, total and indirect elasticities of Table 2 by the best educated guesses described in the text. Starred values denote values obtained by evaluating the model elasticities on the same basis as that used for the visual estimates -- the twelve months previous to the implementation of the Act.

would not offset the corresponding values of 11.0%, 26.3% and 6.8% unless the "best educated guesses" used to obtain the results for the three quantitative factors were dramatically modified. It is clear that we must discuss the significance of the qualitative-structural factor.

Increased Moral Hazard and Adverse Selection

i) Reporting Effects or Moral Hazard After the Fact

In Section 3, we pointed out the possible presence of a reporting effect and distinguished between characteristic (D), a motivation to report some accidents with material damages only as accidents with injuries, and characteristic (G), a motivation to report accidents with material damages only, more willingly to insurance companies. In the absence of further data, for instance on the number of hospital admissions related to road accidents, the possible tendency to exaggerate claims for injuries cannot be ascertained exactly; neither can we measure the net reporting effect on accidents with material damages only. However, it is certain that reported increases in such accidents and in injuries are not solely due to a possible reporting effect: this would imply that fatalities (that can be neither faked nor hidden) had increased[5] because of higher road use and qualitative change associated with the Act, but that all other measures of road safety had remained unchanged. Moreover, other considerations to be presented shortly also imply real increases in all measures of road safety.

ii) Compulsory Insurance and Moral Hazard

The first consideration that points to a strong real component in all three main measures listed in Table 4 (page 19), is the effect of characteristic (E) of the Act, which effectively increased to about 100% the proportion of vehicles insured by insurance companies. This may seem unexpected because the obligation to carry a minimal amount of third party liability insurance existed since July 1961; it appears that the added obligation to show proof of private insurance for material damages and to pay a premium for bodily damages simultaneously with the vehicle registration application made it more difficult than before to avoid insurance. The 1961 law increased the proportion of insured vehicles approximately from 0.65 to 0.81, a variation that is comparable to that of the 1978 law. An idea of the effect of this forced insurance may be had by consulting Table 3 (page 18) where two estimates of the effects of the 1961 law are given.[6] Both models indicate increased fuel sales, increased accidents with material damages only and increased injuries; the effect on fatalities is uncertain, but on balance probably positive. It seems that forcing consumers to be insured reduces their care; in this respect, the 1978 law simply had more administrative teeth than the 1961 law, and certainly reduced driver care, but one cannot assign a precise part of the total increase to it, even on the basis of the 1961 results, because the remaining 15% of uninsured vehicles must have been different from the previous group that had been responsive to the requirements of the previous law.

iii) No-fault and Moral Hazard

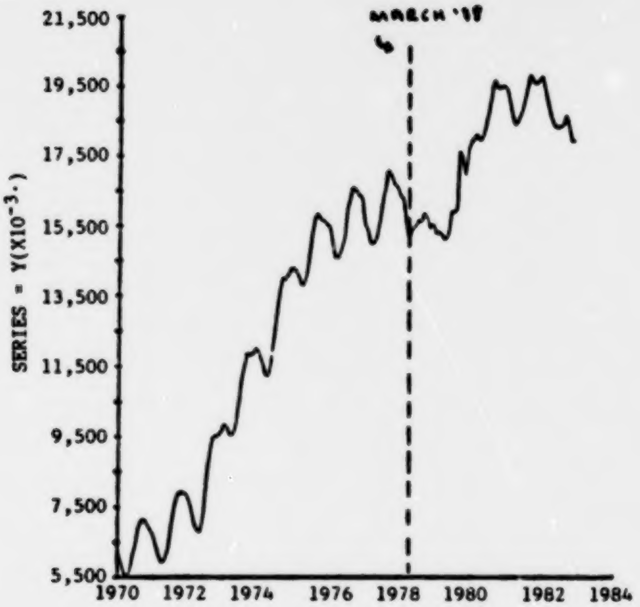
Essentially, being forced to be insured reduces the consumer's size and variability of loss in the event of an accident; the no-fault provision of the law also reduces the rewards of driver care but, in the absence of previous experience with this feature of the Act, there is no way to assess its importance, let alone compare it with the forced insurance and flat premium parts of the total effect. For other jurisdictions, we have not found modeling results on comparable complete no-fault systems for bodily damages; neither do Landes' [5] results on the introduction of limited no-fault insurance in 16 American states provide any guidance: they were obtained with a very simple model and shown by Zador and Lund [6] to be very sensitive to slight changes in specification.

iv) Flat Premium Rating and Adverse Selection

A third consideration pointing to a strong real component in the totals for (1) and (4) in Table 4 (page 19) is the indirect evidence of the impact of the uniform premium system for bodily damages. By subsidizing "bad risk", this system created adverse selection. Of course, "bad risks" have higher accident rates in all accident categories -- not only in the fatal category. Evidence of this additional adverse selection, with a significant effect on the risk composition of the stock of drivers, is extremely strong.

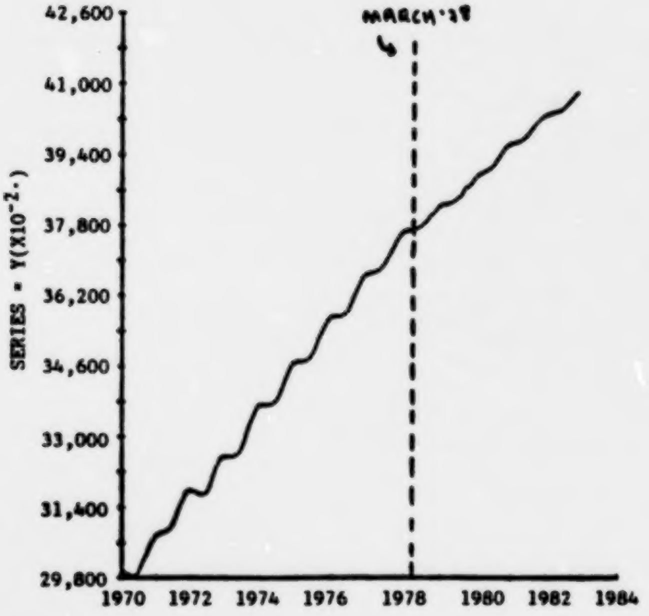
Consider Graph PR1617C (page 22) showing the proportion of drivers belonging to the 16-17 age group. The age pyramid was such that their share of the total stock of drivers was stabilizing around 1976 and 1977. The new Act shifted this plateau upwards by about 2-3 percentage points, a 15-20% increase of the share. In [3], we show that the relative participation rate of the 18-19 age group also increased rapdily for 2 years before getting back on trend.

Of course, the effect of the subsidization of relatively bad risks did not occur only in these obvious classes. One can see on Graph PRCOF70 (page 22) that the proportion of women in the stock of drivers, which had been increasing according to a linear trend, suddenly started increasing much more slowly along a new trend line -- the slope suddenly changed, as one would expect from a



PR1617C

PROP. OF DRIVERS 16-17 YEARS OLD (CORRECTED) IN QUEBEC
(JAN 1970 - DEC 1982)



PRCOF70

PROP. OF FEMALE DRIVERS (1970-82 NO. PROC.) IN QUEBEC
(JAN 1970 - DEC 1982)

structural price change taxing women to the benefit of men.

Our "best educated guess" of a 3% increase in the number of driver permits does not mean that all of this increase consisted in "bad risk". The Act lowered the average price of insurance and changed relative prices, and perhaps also some absolute prices, to the disadvantage of "good risk", some subcategories of which might have shrunk. Adverse selection only means that the average quality of the stock of drivers fell.

6. CONCLUSION: DETERRENCE AND EFFICIENCY

With the help of the DRAG model, we conclude that the 1978 no-fault law in Quebec certainly increased real (not only reported) road accidents and victims but that the estimated increases, although plausible and conservative when compared to the results of intuitive visual analyses, are not all very significant in a statistical sense. Our results also suggest that the main effects of the law did not occur because of the subsidized and reduced average real price of insurance, the resulting increased number of drivers, or the decreased number of cars: they apparently occurred because of the qualitative and structural change of the new system. This structural change consisted mainly of (i) forcing 14-18% of uninsured vehicles to carry insurance, (ii) removing the notion of fault for bodily damages and (iii) charging a flat-rate insurance premium for bodily damages independently from the driver's safety record. It is not possible to unravel the influence of each of these three simultaneous components, but previous moral hazard experience with compulsory automobile insurance and the very strong evidence of adverse selection caused by the subsidization of highrisk drivers suggest that the contribution of no-fault, as such, to the reduction of driver care and deterrence was very small compared to the contributions of the two other elements.

It is in principle possible to correct most of the inefficiencies caused by the law by setting up an adequate rating system that induces individuals to face the true social road safety cost of driving. Boyer and Dionne [7,8] have shown that multi-period no-fault insurance contracts based in part on the individual's past driving record can give individually rational self-protection activity levels that are socially efficient over time in the presence of both moral hazard and externalities; they are studying the empirical foundations of such a system and have already shown [9] that an individual's previous accident, demerit point and infraction records are significantly related to the probability of accident. The detailed design of an experience-rated pricing system, particularly of one compatible with the absence of discrimination on the basis of age or sex, or the formulation of an equivalent combination of insurance premia and fines, is an empirical matter that will take time to evolve. It is also clear that the potential inclusion of of information from police records into the pricing system is easy in the presence of a centralized rating agency or mechanism.

ENDNOTES

1. As the proportion of insured vehicles increased by 19% from 84% to 100%, this number is compatible with the 20% increase in the frequency of claims per vehicle experienced by insurance companies.

2. A part of the existing tax revenues from fuel sales was earmarked to finance the public régime, but the tax rates on fuel were not increased.

3. As shown in [2], it is difficult to estimate the real price change as one has to take into account the new structure of the private sector as well as the respective roles of economies of scale, subsidies from general revenue and internal accounting rules within the new public administration.

4. The DRAG report uses a new analytical formula to compute these "elasticities" for dummy variables. The formula used is exact in the case of linear equations and approximate in the case of non linear equations.

5. On a calendar year basis, fatalities increased from 1,556 to 1,765 (13.43%) in Quebec as they fell from 3,697 to 3,664 (0.89%) in the rest of Canada between 1977 and 1978. (Reported in: G. Ledoux, BILAN INTERNATIONAL des victimes de la circulation routiere de 1970 a 1981: le Québec et le Canada. Rapport technique. - Régie de l'Assurance Automobile du Québec, avril 1985).

6. Estimates obtained with the model variant are probably more accurate than those of the reference model because they are based on a more refined representation of the influence of the lowering of the minimum driving age a year later.

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OVERVIEW OF RESEARCH REPORT INTO AUTOMOBILE INSURANCE MARKET IN ONTARIO

Prepared for the Inquiry Into Motor
Vehicle Accident Compensation in Ontario

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I. INTRODUCTION AND OVERVIEW

The Ontario automobile insurance industry has been the subject of analysis and debate periodically over the last 15 years. The questions about the competitive structure of the industry and whether there should be a government-run monopoly (Crown Corporation) seem to be highly correlated with major increases in automobile insurance premiums and limited availability in coverages.

Just recently, interest in this area has re-emerged due to high premiums for certain sub-groups of drivers, teenagers and taxicabs for example, to allegedly high premiums in Ontario compared to the public systems in Manitoba, Saskatchewan and British Columbia, and to the large increases in Ontario's premiums over the last few years.

The public versus private delivery of Ontario automobile insurance has received increasing attention recently; one of the opposition parties made the introduction of a public automobile insurance system a major plank in its election campaign. Public awareness of the issue has been heightened by comparisons of premiums for particular classes of drivers across the public and Ontario systems. The Ontario government in response to these concerns has frozen premium rates, required a roll-back in rates for teenage drivers and has announced the establishment of an auto insurance rate review board; this board would provide regulatory oversight on Ontario insurance rates.

In addition, the Ontario government recently established a task force under Justice Osborne to conduct an inquiry into Motor Vehicle Accident Compensation in Ontario. The emphasis of this Inquiry is the current tort system of compensation for injury and the implications of changes to a system of no-fault. In the terms of reference, one area for study was an evaluation of a private versus public delivery of a no-fault system of automobile insurance. This issue, as formulated in the terms of reference, covers two areas: public versus private delivery efficiency holding tort system constant and fault versus no-fault, holding delivery constant. It is the first of these two areas that is covered in this report and the background studies.

This research project investigates the state of competition in the Ontario automobile insurance industry with a view to identifying any competitive problems and recommending an appropriate regulatory response. The regulatory response, apart from the existing solvency and minimum capital requirements, can range from information provision to consumers about the insurance product, through formal rate regulation, to the establishment of a Crown Corporation to provide automobile insurance. Some underlying assumptions of the study were the maintenance of the current fault system and the continued use of some system of risk rating to establish differential insurance premiums. In this report, the negative consequences of minimizing risk differences in premiums will be considered in section III.

Three studies, commissioned for this project, address the areas of competition in the industry, efficiency comparison of public versus private automobile insurance systems, and the appropriate regulatory response to observed competitive problems in the industry. The first area of interest was investigated using the widely-accepted structure-conduct-performance paradigm. This methodology determines whether industry structure and performance is consistent with a competitive or collusive market. In addition to an evaluation of the overall automobile insurance market, sub-markets such as re-insurance and taxicabs are also considered. The structure analysis was undertaken in the report by Professor Potvin; industry performance was evaluated by Professor Booth in his report. The conclusions of these studies are that the structure and performance of the industry are consistent with a competitive market; potential problems in sub-markets are unlikely to be serious; and premium levels reflect the expected costs of providing insurance.

The issue of the relative efficiency of public and private plans is investigated by Professor Booth. Given that economies of scale are non-existent and entry and exit is observed in the market, it is unlikely that public systems are any more efficient than private ones. Any observed expense differences are related to differences in services provided and procedures undertaken. Although direct estimates of the costs incurred by public plans if they engaged in the same functions as private plans are not available, indirect evidence suggests that public plans would not have significantly lower costs. In addition, a number of costs incurred by private systems need not be covered by the public systems; examples are corporate income taxes, direct charges for use of government services, and in the case of British Columbia, the 3% premium tax. These subsidies clearly bias the comparison against the private companies. The conclusion is that public systems are not more efficient than private ones and cost imputations associated with subsidies could result in their being more expensive. One important conclusion is that comparisons of premium levels are at best a rough indication of relative efficiency and at worst, are misleading. Therefore, little reliance is placed on these comparisons.

The final issue of regulatory response is considered in the paper prepared by Professor G.D. Quirin. This paper summarizes the regulatory practices of a number of jurisdictions and considers the problems associated with these practices. An important implication of this study is that there will be serious problems of employing rate review procedures when the industry is essentially competitive. The problems include a reduction in innovative rating procedures, no competition in pricing, diminished entry from the industry, substantial costs of the regulatory process, a reduced supply through increased exit, and with the removal of competition, a decrease in operating efficiency. An alternative scenario is that the regulatory process could be "completed" either by the industry or the political process. If the former, rates under regulation would be higher. If the latter, uneconomic cross-subsidies could be introduced. The conclusion is, given that the industry is competitive, no regulation over and above the existing solvency/capital requirements is necessary. If regulation is desired for non-economic reasons, the best approach is the California model which relies on market competition to regulate prices and a regulatory oversight to evaluate the degree of competition in the markets. The next best alternative is a file-and- use system where there is no constraint on the use of differential rates on the same policy or on the use of policies that deviate from the standard policy.

If there is a perceived problem with consumer ignorance concerning the product, this should be addressed directly by information provision. However, there are other products which are difficult to interpret where information provision is not required. In addition, insureds do shop around since the lapse rate with the insured's current broker is about 15 to 30% per year. These individuals must be switching based on some information such as price for a given set of coverages.

This report is structured as follows: in section II some analytical issues are described to provide the framework for the analysis. The section describes the product, develops a model for insurance and draws some implications from this model for the setting of premiums and describes the concept of market failure along with the appropriate regulatory responses; in section III the structure- conduct-performance analysis is presented. Section IV addresses the efficiency of public compared to private delivery of insurance and deals directly with some of the conclusions of the Woods Gordon Study on this issue; the regulatory response is provided in section V and conclusions and recommendations are summarized in section VI.

II. SETTING THE FRAMEWORK FOR ANALYSIS

1. Market Failure and the Regulatory Response

Economists have long extolled the virtues of a competitive market; this, in fact, is the norm against which all other potential market structures are evaluated. In a competitive market, prices charged for goods and services are just sufficient to cover costs and provide firms with a normal return on investment. This normal return (also referred to as zero economic profits) reflects the risk on any investment needed to provide the product or service and is just sufficient to induce firms to stay in the industry but not sufficient to entice firms to enter. In addition, production occurs under the most efficient combination of inputs and the economy's resources are allocated to the most efficient uses.

There may be situations in which the market for a particular product or service deviates from the competitive norm and the competitive market does not reach its full potential. When this occurs, there is a market failure and government intervention in the market is often justified on the basis of this market failure. However, any interference in the market must be justified after considering the costs and benefits. The costs do not refer only to out-of-pocket costs but to induced changes in the industry which result in an inefficient use of resources.

If a market failure is observed in a particular industry, the crucial question becomes the form of the government intervention. The extent of the intervention should be related to the degree of the market failure. For example, a small deviation from the competitive norm due to high costs of informing consumers suggests that any intervention should assist the competitive process by providing information. A more serious market failure may result in the scrapping of the vestiges of competition and the introducion of a regulatory process which takes price- setting power out of the hands of the industry. Therefore, the regulatory response should be in proportion to the failure. To use a blunt all-encompassing regulatory instrument, such as the establishment of a Crown Corporation, when all that is needed is a focused, small intervention, is very costly to the economy in terms of inefficient use of resources; the product will be produced and priced inefficiently.

Market failures refer to natural or inherent reasons why an industry will evolve from a competitive norm or will cease to exist. Therefore, the formation of a cartel of producers is not a market failure in our sense although it is certainly a deviation from the competitive norm.

Market failures take the following forms:

i) Transaction Costs

There are significant transaction costs facing consumers in informing themselves about the characteristics of the product of a particular firm or of another firm producing similar products. This can provide each firm with some power over price and hence result in a deviation from the competitive result. Obvious responses are to introduce minimum standards through licensing or to establish an information provider. In some cases it is conceivable that the deviations from the competitive norm are so small that even the costs of the modest intervention exceed the benefits. In this case, no intervention would be warranted.

ii) Natural Monopoly

It is suggested that in some industries, the cost structure is such that the larger the firm the lower the average or per unit costs of production. In this case, competition among firms is impossible and only one firm may be viable. This produces a monopoly under which the producer controls price and production; in addition the monopolist may prefer to operate less efficiently than a competitive firm. The result is an inefficient allocation of resources. Since entry is impossible, the natural monopolist is free from competitive pressures. The normal regulatory response is to introduce a regulatory scheme which sets prices based on costs and a return on invested capital. This procedure introduces its own inefficiencies but it is alleged that the benefits of this intervention exceed the costs.

iii) Externalities

In most markets the prices charged for a product or service reflect all the costs imposed on society in the production of the product. However, it is argued that there are situations in which the use of a product imposes costs on other parties. These costs are not reflected in the price of the product and hence the market price does not act as a deterrent to the generation of these external costs. These third party costs are called externalities and their presence has been used as a justification for government intervention. The externalities may also refer to benefits which are not factored into the product price and hence insufficient benefits will be produced since output will be too low.

An example of a cost externality is the cost imposed on other motorists when a new motorist enters a highway; this is called a congestion externality. An example of a benefit externality is the employment effects and tax benefits that occur from setting up risky businesses. The latter has been used to justify government loan guarantees on high risk business loans; these loans would not be undertaken by the private sector since the participants in this market do not value the positive externalities. There is not much evidence to justify the importance of this externality and it is used only as an example.

The purpose of this report and the underlying research is to identify whether there are market failures in the automobile insurance market which justify government intervention. If the industry is found to be competitive, then the imposition of regulations affecting pricing strategies and product development will be detrimental to the provision of automobile insurance and the use of the economy's resources.

2. Definition of the Product

The product of concern in this report is the standard Ontario automobile insurance policy and the price (i.e., premium) charged for this product. The product is an aggregate of three separate coverages each of which has specific costs to the company and premiums. Since the coverages are sold in a bundle, although specific types and levels of coverage may differ among insureds, there are common costs such as selling and administration that are not allocated to each segment.

The composite or bundled product provides protection to the insured for costs incurred along three dimensions; these are known as schedules.

i) Schedule A: Third Party Liability Coverage

This section protects the insured against liability imposed by the tort system for loss and/or damage resulting from the ownership, use or operation of the automobile, and resulting from bodily injury to or death of any person or damage to property. The minimum coverage of $200,000 is compulsory, and excess coverage can be purchased.

The cost to the insurance company of dealing with claims on this Bodily injury and Property damage (BIPD) section in any policy year will depend upon the frequency of accidents, the dollar level of court awards and the cost of using the tort system. The actual dollar value of claims costs can increase over time with inflation and the number of drivers in the specific area. However, there also may be structural changes that will cause significant changes in observed claims costs. These include changes in the costs of using the legal system, changes in payouts on BIPD suits through the tort system and the use of a gross-up for taxation of lump-sum awards to insureds. In addition to changes in the size of the award, the total claims costs can increase with an increase in the number of legal suits. It is anticipated that certain provisions under the Family Law Act in Ontario will increase the use of the tort system for claims of third parties (relatives). The greater the frequency of these claims, the higher are the expected claims costs.

ii) Schedule B: Accident Benefits Coverage, No-fault

Accident benefits coverage, on a no-fault basis, is provided under this section of the standard automobile insurance policy. There is compulsory coverage for medical payments, funeral expenses, disability income benefits and death benefits. The benefits are limited and for claims above this 'threshold' or scheduled value, there is access to the tort system.

Since a significant number of the claims are below the threshold value, the actual claims costs are unaffected by the cost of using the tort system and any of the structural changes noted in the discussion under Schedule A. The actual claims costs in any province will depend upon the scheduled threshold values in the province.

iii) Schedule C: Collision Coverage

The coverage under this section in Ontario is optional and can cover a wide range of specified perils. There are four levels of coverage for which an insured may obtain indemnification. The most inclusive of the coverages is the 'all perils' coverage. Collision or upset limits coverage to damage incurred in collision or upset of the vehicle. Comprehensive coverage provides indemnification for damages other than collision or upset and specified perils is a coverage limited to loss from specific events.

These coverages invariably include a deductible portion. This generates 'co-insurance' which makes the insured partially responsible for covering the cost of the damage. This may assist in generating better driving habits and ultimately lower premiums.

The cost of collision claims is affected mainly by the inflation in automobile repair and replacement costs. The costs of using the tort system to determine fault are minimized through the use of a formula approach to define guilt in specific accidents. The result is a circumvention of the court system and thus a reduction in costs. This innovation was introduced by the insurance companies to minimize legal costs; without the formula definition of fault, it would pay an insurance company to incur legal costs to determine fault. This would be a profitable decision for the individual firm but at an aggregate level, costs (and hence premiums) would have to be sufficiently high to cover the additional legal costs. (Grubel, 1985)

For each of the three schedules there are claims costs. The actual amount of these costs is referred to as ex post claims experience. An important distinction must be made between ex ante and ex post. The level of premium set for each coverage (ignoring the common expense component) will depend upon the insurance companies, expectations of the losses to be incurred for the specific level of coverage in each section. The expectations will be based on the actual claims costs incurred and the impact on claims costs of any changes in claims payouts or frequency of law suits.

If the actual costs during the policy year are equal to the expected costs, then the insurance company will earn its level of expected profit. However, since claims costs have a random component, it is likely that ex post, the claims costs differ from their ex ante level. As will be argued in a subsequent section, this does not mean that the insurance company can increase its premiums in the future for the specified segment to recapture the loss, if the actual losses are greater than expected, or to reduce the premium if actual losses are less than expected. The premium will reflect the expected level of costs over the policy year; historical loss experience will be one factor in determining the premium.

3. Model of a Casualty Insurance Company and Implications for Performance

A very effective method to provide a framework for analysis and to understand how an economic entity operates is the use of a model; in our analysis a model is used that incorporates the major issues in the insurance market: risk and the time value of money. The model makes a number of simplifying assumptions but even so provides many relevant and important implications for the expected profitability of the underwriting and investment activities of a casualty insurance company. In addition, as some of the assumptions are relaxed, a richer set of implications are obtained.

The model is developed in the Booth paper; it evaluates the insurance contract from the viewpoint of the equityholder who is the ultimate owner. No distinction is made for joint stock or mutual companies since research results (Mathewson and Winter, Halpern and Mathewson) suggest that they behave very similarly with respect to profit maximization for equityholders (for joint stock companies) or for policyholders (for mutualized firms). The models consider first an insurance company in which there is no regulation of any kind including solvency requirements. A second model introduces solvency regulations by relating the premiums written to the amount of equity capital in the firm. Finally, the impact of corporate taxation is considered.

a) No Regulation

The first model identifies the expected profits to the equityholders of the firm from their investment in the equity of the company. The expected profit is composed of three elements: the first portion results from the investment of the equity funds in the investment portfolio of the firm; this is like the earnings generated from the investment of funds into an investment or mutual fund. The second portion represents the income generated on the 'prepayment' of premiums by the policyholder. Since premiums are collected in advance of when they are needed to pay a claim and since claims need not be paid immediately, especially if there is pending litigation, funds for investment are provided by premiums. These two sources represent investment income. The third element represents the income derived from the underwriting or insurance exposure part of the business. This expected income is equal to the difference between the premium dollars collected and the expected claims, variable and fixed costs.[1] It is important to stress that the actual profits earned by the insurance company need not equal the expected profits. If the actual values of the loss ratio, expense ratio or return on the investment portfolio differ from the expected value, then actual profits deviate from their expected value.

Based on a well-accepted model of the valuation of risky cash flows, the model determines how the premium should be set so that the market value of equity is maximized. The model assumes that the risk from the insurance operations is diversifiable and hence there is no need to provide a rate of return on funds invested in the insurance business that exceeds the risk-free rate. This does not imply that there is no variability in the underwriting performance of the firm, however, the variability is independent of the movements in the overall economy and hence can be diversified away.

From this assumption, the premium is set such that the underwriting ratio, defined as unity minus the sum of the loss and expense ratios, is expected to be negative. Thus for every dollar of premium, the claims and expenses are in aggregate greater than one dollar. The loss is equal to the proportion of each premium dollar available for investment times the risk-free rate. The implication of this model is that the expected underwriting ratio is just offset by the investment return expected to be earned in the investment of 'free' capital generated from the writing of insurance. Therefore, it is expected that the underwriting profit earned by the insurance company on a line or on all lines should be negative.[2]

For example, if the interest rate is 10% and every dollar in premiums generate $1.10 in investible funds, then the underwriting loss per dollar of premium is 11 cents (i.e., $1.1 x .1).

One interpretation of this result is that the purchaser of an insurance policy is pre-paying for a service. Suppose the insurance company were able to obtain these funds and not have to pay the insured for the use of the funds. The result is that the insurance company obtains funds at a zero cost and invests them to earn a positive rate of return. This profitability will draw more companies into the insurance business and, in order to attract business, the entrants will lower premiums and hence underwriting profits. The premium reductions will continue until the insured is being given credit in the premium paid of an amount equal to the risk-free rate for the use of their funds. The net result is a zero economic profit on the underwriting business and imputed risk-free return on the investment of the premium.

Another way to look at this result is to recognize that in the model, the insurance portion of the business is totally self- financed; no equity funds are needed for the ongoing operations of the company. Since the policyholders incur no risk, their return is the risk-free rate.

Another interesting result is the role of common equity in the company. The premiums written reflect potential claims and the policyholder may be concerned that under certain circumstances there will not be sufficient funds available to pay claims. To reduce this risk the insurance company has an equity cushion to protect against catastrophic loss. There is no part of the equity that is allocated or needed for the insurance operations. Hence, there will be no return expected on equity from the basic insurance business. The equity is invested in the bond and stock investment portfolio; both the cash flow and the principal amounts may be used to pay claims. The greater the ratio of premiums to equity, the riskier is the policyholder's potential claim. In an unregulated environment the insurance company chooses the ratio of premiums written to equity based on a number of variables including underwriting variability and bankruptcy costs.

The expected rate of return on equity earned by the stockholder is composed of two parts; the first is a return on the investment in the securities portfolio less fixed costs; the second is a return to reflect the risk level accepted by the equityholder. This is portrayed in Figure 1.

FIGURE 1

The relationship portrayed in Figure 1 is

$$\text{Profit}/E = (r_A - F/E) + (r_A - r)\, P^*/E$$

where Profit/E = expected rate of return on equity

r_A = expected return on investment portfolio
F/E = fixed costs as a proportion of equity
r = risk-free rate
P^* = dollars generated for investment from premiums
E = equity investment

The variable P^*/E is a measure of the leverage ratio or risk accepted by the equityholder.

The implications of this model are very important. First, an underwriting loss is the expected result; an industry rule of thumb suggests a 10% loss on automobile insurance. When the imputed return from the investment income is included, the net underwriting loss is expected to be zero. The Booth report identifies net underwriting results for the Ontario automobile industry ranging from a high of 8.6% in 1982 to -12.9% in 1985. Second, as interest rates increase, the profitability of investment increases and to obtain more 'free' capital for investment, the insurance companies will lower premiums. This will increase the loss from underwriting activities and increase expense and claims ratios. Third, as the amount of funds available for investment purposes per dollar of premiums increases, the premium will fall. Thus a firm which can slow claims settlement will have lower premiums. This provides compensation to the policyholders for the delay in settling the claim. Fourth, the insurance company is composed of two pieces -- an insurance underwriting function which is financed by premiums and an investment fund into which equity investments are placed. The amount of equity capital used is determined by the firm. The insurance company can expand its insurance side of the business without any increase in equity if it is felt that the resulting risk is tolerable. These two businesses undertaken by insurance companies lead to some confusion. The observed profitability of the insurance company usually refers to the total operation; therefore profits may be large or small or negative depending upon returns on the equity invested in the securities portfolio and the underwriting performance of the firm. It is the latter only that should be of interest in evaluating the competitiveness of the industry. The profits from the investment portfolio do not accrue to the policyholders in a joint stock company, and hence are not relevant in determining whether premiums are too high. Finally, premiums must be set based on claims costs, expenses and the imputed return on investment of the premium. Observing the net underwriting profit based on the premium, one should, on average, observe a zero value. If a firm continually has negative results, this implies that premiums have not been set properly and in a joint stock company, this would result in a reduction in stock price since the equityholders' returns are being used to pay claims. In a competitive industry the presence of continuing net underwriting losses is unlikely to occur. In a public transportation system, continuing net underwriting losses can occur and this would constitute a subsidy of drivers by taxpayers in general.

b) Solvency Regulations

The solvency regulation introduced into the model relates to the maximum permitted level of premiums per dollar equity; for example, for firms under the Federal Superintendent of Insurance, the regulation permits three dollars of premium per dollar of equity. This regulation places an upper limit on the risk to the equityholders and insureds. The result of the regulation is to tie together the underwriting and the investment decisions; they are no longer separable. For a firm to write more premiums, a larger equity base is required. This may slow up adjustments to competitive opportunities somewhat.

The implications of this model are similar to the 'unregulated' one in that there is expected to be an underwriting loss which is expected to be offset by investment income earned on the premiums. This loss, however, is related not only to the riskless rate of interest but also to the expected ability of the portfolio investment segment to outperform the market. For example, if a company expects that it will beat the market on its investment portfolio, it will try to obtain more 'free' investment funds by reducing premiums. It will have a larger underwriting loss than a company which does not believe that it can beat the market. Therefore, premiums and underwriting losses can differ among companies based on their expected investment performance.

c) Corporate Income Taxes

The equity investment returns are taxable along with any underwriting income that is generated. Since the latter is expected to be a loss, the tax impact will be to reduce taxes on other income. The taxation of the returns on equity investment provide an interesting problem. Why would an investor purchase the equity of an insurance company and have income from investments that are taxable in the hands of the company and not purchase a mutual fund in which there is no taxation at the fund level? In order to offset this disadvantage, the premiums must be larger so as to offset the tax that must be paid. The effective tax rate is the important variable and with underwriting losses and the non-taxable status of cash flows from some financial instruments, this tax rate need not be large. In the Booth work the tax rate used is 15% as obtained from a Department of Finance estimate for financial institutions and insurance companies. Thus premiums will be higher due to the presence of the corporate income tax.

d) Further Extensions

One assumption of the model is that underwriting activities, although having variability, do not have risk since the variability can be diversified away. The diversification can arise either through multiple line writing or through the shareholder purchasing a diversified portfolio. To the extent this diversification is unable to remove all risk, the underwriting income will have to be increased and the premium holder may have a higher return attributable to the premium.

III. COMPETITION IN THE AUTOMOBILE INSURANCE MARKET: STRUCTURE, CONDUCT AND PERFORMANCE

1. Introduction to the Methodology

The two extreme forms of market structure are perfect competition and monopoly. The former, in its usual version, requires a large number of identical producers whereas the latter usually refers to a single provider of the good or service. In the perfectly competitive model, no individual producer has market power; they each take the price as given. In the monopoly model, the monopolist has market power. The monopoly result can be obtained with many producers if they form a cartel in which the price is set at the monopoly level, each participant has a certain allocation of production and sells at the monopoly price, and there are barriers to entry. The probability of a cartel being formed and being successful depends upon the number of firms in the industry. Since there is always an incentive for each firm in the cartel to cheat by selling more than its allotment at a price slightly below the monopoly price, the cartel must be policed. The greater the number of firms in the cartel, the harder it is to identify if one firm is cheating and thus the greater the probability that the cartel will unravel. If there are no barriers to entry, the high profits will induce new entrants who when brought into the cartel increase the number of firms in the cartel and the probability of cheating. Therefore, market power is more likely to be correlated with a small number of firms and high barriers to entry since this makes the detection of cheating easier and hence the cartel is more viable.

There is a positive relationship between market power, the ability to set price above marginal cost and earn monopoly profits, and market structure. Although it is possible that a large number of firms can still form a cartel, this is unlikely. Similarly, as long as there is the potential for entry and exit, the competitive outcome can be observed in a market which has as few as two firms. These outcomes may be the exception and not the rule but the importance of entry and exit should not be underestimated.

The structure-conduct-performance model suggests that the key to predicting performance of an industry in terms of profitability, technical progress, price determination, etc. is found in the structure of the industry. Structure includes the number of firms, their size distribution, the ease of entry and exit, the potential for joint activities and cost considerations. Conduct, which is influenced by market structure, refers to the firm's objectives, price-setting behaviour and behaviour toward rivals. This in turn generates industry performance.

As already noted, structure alone cannot determine conduct and performance. As seller concentration is increased, it is not always true that there will be collusion and market power; potential entry is sufficient to generate the competitive result. Therefore, market structure will given an important indication of market power but at its worst, will underestimate the competitive nature of the industry when entry is present.

Market structure is measured in a number of ways. The obvious method is to look at the number of firms. This approach, while giving some indication of structure, does not consider the size distribution of the firms. To accomplish this end two other measures are used; both relate to the concentration of the output of the industry. The first is called the concentration ratio and it measures the proportion of the industry output, or in the automobile insurance industry, sales, controlled by a certain number of firms. For example, C_4 is the concentration ratio for the top four firms. Although there are no theoretical values of this ratio to distinguish a competitive from a monopolistic industry, it is reasonable to infer that the potential for collusion and hence monopoly power is higher when the four firm concentration ratio is 90% than when it is 25%.

The second measure of concentration is called the Herfindahl index; this measure takes into consideration not only the relative size of the firms but also the number of firms. The Herfindahl index is defined as the sum over all firms of the square of each firm's market share. For pure monopoly, the value of the Herfindahl index is 1.0. For a perfectly competitive industry in which each firm has the same market share, the Herfindahl index is the reciprocal of the number of firms in the industry. As the number of firms becomes larger, the value of the Herfindahl index approaches zero. For example, if there are two identically-sized firms, the index value is 1/2. With an industry of 25 firms, the index value is .04. Since the index is based on the squared value of each firm's market share, the greater the inequality of the market shares, the closer to unity will be the value of the index.

In most applications, performance is evaluated with reference to the rate of return on equity invested in the firms within the industry. Although there are a number of theoretical problems with this measure (see Potvin), it cannot be used in the automobile insurance market for a number of other reasons. First, automobile insurance is just one of a number of lines of insurance written by casualty insurers. To identify the results of one line would require arbitrary allocations of costs and equity; the results would not make any sense. Second, if there were firms that wrote only automobile insurance, the rate of return on equity would depend upon the investment portfolio returns and the degree of financial risk, i.e., ratio of premiums to equity. Any comparisons would have to account for very different investment portfolios and financial leverage in order to obtain reasonable performance measures. These adjustments are difficult to undertake since much of the needed data is not available.

Finally, statistical evidence is consistent with the hypothesis that higher rates of return on equity are found in highly concentrated industries with significant barriers to entry. This may be due to collusion. But with the statistical problems associated with tests of the relationships we cannot conclude that high concentration necessarily results in market power. However, we can conclude that a lack of concentration is consistent with no market power.

2. Market Structure

2.1 Concentration in the Automobile Insurance Market

A standard methodology to draw inferences about the state of competition in a market is to consider the degree to which the output of an industry is controlled by a subset of companies. This approach provides an indication of the degree of competitiveness; however, as is discussed in the Potvin report, the approach can underestimate the degree of competition in the model since the influence of potential competition and contestable markets is not considered. This influence is important since it can generate a competitive outcome even with a small number of firms. These concerns are addressed again later in this section.

The methodology requires the identification of the product, the extent of the market and the definition of the entity or unit of analysis.

i) Product

In section II-3 the product or standard automobile policy was defined in terms of three types of coverages: collision, accident benefits and bodily injury - personal damage. This describes the product along a particular dimension. But in this section a different concept of the product is considered; here the product reflects writing or selling the policy and administering the policy; the latter includes the risk bearing function. In some companies the writing and administration are combined; in other companies the writing is done by agents and the administration by the insurance company. Some companies, by using reinsurance, can eliminate the risk bearing function entirely.

ii) Output Measure

Conventional analyses use a measure of total revenues as a descriptor of firm size. In the automobile insurance industry the analogue would be net premiums written for the economic entity; this variable reflects the overall risk exposure of the entity since it is equal to direct premiums written less reinsurance ceded to other companies (or plus reinsurance accepted from other companies).

Unfortunately, since direct premiums written data are available for the Ontario market only, this output measure is used in the analysis. Fortunately, this measure provides information concerning the relationship between consumers and individual companies that is not available from net premiums written. The former considers the total product, i.e., the sale of the policy and its administration and risk bearing; the latter considers only cases where the entity sells and administers. For example, consider the case where a firm has $1 million in direct premiums written but reinsures the total amount. The net premiums written are zero. Should this entity be eliminated from the analyses of the competitive structure of the industry? By using net premiums written this firm is eliminated and there is an underestimate of the degree of competition in the market. Using direct premiums written includes the firm and provides a better indication of the competitive structure of the industry.

iii) Definition of the Market

The automobile insurance market is really composed of a number of sub-markets such as taxicabs, long distance trucking, small towns, etc. These markets may be different from the overall automobile insurance market and a competitive result in the overall market may not be replicated in the sub-markets where the choice of companies is limited. Since the data on the sub-markets is limited, the empirical analyses on market structure will apply to insurance for non-commercial drivers who have access to brokers and agents. A discussion of sub-markets is left to a subsequent section.

iv) Economic Entity

Although a natural measure of the economic entity in the analysis is the individual firm, the existence of a group of companies with a common owner, suggests that the individual firm is not the locus of pricing decisions. Therefore, the entity in the analysis is the group which is defined as the collection of all insurance companies with the same owner. To highlight the difference, in 1984 there were 157 individual companies writing automobile insurance; this was equivalent to 112 groups.

v) Empirical Results

The number of economic entities involved in the writing of automobile insurance in the Ontario market is large; in 1984 there were 107 groups. The numbers from 1974 to 1984 averaged 113 with a high of 136 in 1974 and a low of 104 in 1983. Thus while entry and exit occur, there is overall stability.

To determine the influence of each group in the market, its share in the automobile insurance direct premiums written was calculated; the entities are then ranked from highest to lowest market share. One striking observation is the continued existence of large and small entities. For example, in 1984 the largest entity, Co-operators Insurance, had 9.39% of the market. The company ranked 20th, Gore Mutual, had 1.6%. As the rank of the company fell, the associated market share became very small.

One interesting feature of the market shares was their stability over time. For example, considering the top ten companies in 1984, 7 were in the top ten in 1979 and 9 were in the top ten in 1974. This does not mean that there were no substantial changes in rankings; Safeco which was ranked 10th in 1984 had rankings of 26 and 25 in 1974 and 1979 respectively.

For the companies ranked 11 to 20, there was more movement. For example, considering the top ten ranked entities in 1984, the average increase in rank for these companies from 1974 to 1984 was 1.6 with a standard deviation of 5.7. However, for the entities ranked 10 to 20 in 1984, the average change in rank from ranking in 1974 was 5.9 with a standard deviation of 13.4. This suggests that it was easier to 'crack' into the 10 to 20 rank than to enter the top ten ranking.

Finally, a relationship of market shares of each entity for 1984 and 1974 demonstrated that large firms maintained their market shares over the period. Subperiod estimates found that large firms increased their market shares over the period 1974 to 1978 and then lost these shares over 1979 to 1984. However, the overall result is that large firms tended to stay large.

This conclusion of relative stability in market share for the top ten firms is not inconsistent with a competitive market where the reputation of the firm is an important element in the sale of the policy. Since the purchaser of automobile insurance is concerned that the firm will be financially able to meet a potential claim, the reputation of the company is important. One element in this reputation is the length of time the firm has been in business. Thus, a new firm may have difficulty in generating substantial amounts of new business. Rapid growth may be available only through merger or acquisitions.

However, the industry can still be competitive even with the existence of reputation impacts. More will be said on this topic in a subsequent section.

Another method of evaluating the structure of the industry is to consider concentration ratios. A number of these ratios can be constructed. The most frequently used is the Concentration Ratio (CR) which identifies the cumulative market share of a prescribed number of entities. Therefore, CR_4 is the four firm concentration ratio and is measured by the aggregate market share of the top four companies. Clearly the larger the market share concentrated in a few firms, the more likely is cartel behaviour and hence monopoly pricing.

Another measure of concentration is the Herfindahl index which is measured as the sum of the squared value of the market share for each entity in the market. This measure reflects both the number of firms in the industry and the inequality of the size distribution of firms. If the industry is a monopoly, the Herfindahl measure (H) is equal to unity. If it is perfectly competitive and there are a large number of firms its value approaches zero. To provide an intuitive feel for the Herfindahl measure a number equivalent is often provided (NE). This statistic is equal to the number of equally sized companies that would generate the observed H measure. The larger the NE the more likely is the industry to be competitive.

All of these concentration measures provide an indication of the structure and hence the competitive nature of the industry.

In Table 1 concentration measures for the Ontario automobile insurance market are presented for the years 1974, 1979 and 1984. To assist in understanding this table the entries for 1984 are interpreted as follows: C_4- the top four firms wrote 27.8% of the direct premiums written; C_8 - the top eight firms wrote 44.5%; C_{20} - the top 20 firms wrote 74%. The Herfindahl index had a value of .0370 which is equivalent to 27 entities of equal size.

TABLE 1

Measures of Concentration in Automobile Industry

Year	C_4	C_8	C_20	H	NE[(a)]
1974	27.4%	42.6%	66.6%	.0325	30.8
1979	36.9	55.8	83.5	.0559	17.9
1984	27.8	44.5	74.0	.0370	27.0

(a) Calculated as 1/H.

Source: Figure 9, Potvin Study

There are a number of important observations from these concentration measures. First, all measures indicate that concentration increased from 1974 to 1979 and then fell such that the 1984 values are approximately the same as found in 1974. The slightly higher value of H in 1984 compared to 1974 reflects the increased value in 1984 over 1974 of C_{20} i.e., slightly higher inequality in 1984. Second, the Herfindahl measure is quite small and close to a value of zero found in a competitive industry. Thus the industry structure is consistent with a competitive industry.

Another way to evaluate the structure of this industry is to compare the concentration measures with those found in other markets. This comparison is made in the Potvin study, Figure 13, where concentration ratios for 20 industries are presented for 1980. These ratios are based on a national and not a provincial market; the larger the market considered, the greater the number of firms and hence the lower should be the concentration ratios. Therefore, there is a bias in the comparison of a provincial market to products in a national market toward showing the former to be less competitive.

For the selected Canadian industries, a comparison with the 1980 concentration measures for the Ontario automobile insurance industry generates the following results:

1. H : Only eight of the twenty industries had an H measure lower than that of the Ontario automobile insurance industry.

2. CR_4 : Eight of twenty-two industries have a lower value of the 4 firm concentration ratio.

3. CR_8 : Nine of twenty-two industries have a lower value of the 8 firm ratio.

4. CR_{20}: Ten of twenty industries have a lower value of the 20 firm ratio.

The conclusions of these comparisons are unambiguous: the structure of the Ontario automobile industry is more competitive than that of a number of Canadian industries. This conclusion is reinforced by the inherent bias against a competitive structure in a smaller geographic market.

Therefore, the analysis of the structure of the market is consistent with a competitive industry. The large numbers and the size distribution of the firms make collusion very unlikely. A similar conclusion was presented by Mathewson and Winter in their analysis of the Canadian general insurance market in total and for specific lines of insurance in a national market. As noted in a previous discussion, this type of structure analysis underestimates the degree of competition in an industry since it does not take into consideration the influence of potential competition; it is the threat of entry when profits are large that can maintain competition in an industry. The influence of potential competition is investigated in more depth when barriers to entry or exit are considered.

vi) Sub-markets

Although the overall Ontario automobile insurance industry is competitive, this may not be the case for sub-markets in the province. In these smaller markets, drivers may not have access to the large number of companies writing insurance. Hence, it is possible that monopoly characteristics are found in these sub-markets. The sub-markets normally considered are taxicabs, long-distance trucking, and high-risk drivers. In addition, it is also alleged that drivers in small towns have restricted access to companies writing insurance and hence pay monopoly prices. We will consider each area in turn.

a) High-Risk Drivers

In a number of the sub-markets, there has been a substantial increase in premium levels and in many cases members of these sub-markets are insured by the Facility Association. This Association is a non-profit organization of insurers which provides insurance to owners and operators of motor vehicles who may have trouble obtaining insurance from a specific carrier.

The groups that make use of the Facility provide us with some indication of the sub-markets that may face noncompetitive pricing. In terms of share of total premiums in a sub-market insured by the Facility, the major users in 1986 of the Facility Association are taxicabs (46%), interurban trucking (23.5%), public buses (15.1%) and funeral vehicles and ambulances (10.1%). In terms of growth over the period 1982 to 1986, major increases in market share insured by the Facility are observed in the same groups. In terms of vehicles insured by vehicle class, the major user is motorcycles where 22% of the vehicles are insured by the Facility; this proportion has remained reasonably stable from 1982 to 1986. Some growth in the share of vehicles insured was found in snow and commercial vehicles.

From these observations, it appears that potential problems of non-competitive pricing could be observed in the taxicab, interurban trucking and public bus submarkets where choice of insurance company is limited.

It is important to recognize that increasing premiums, reduced coverages or increased use of the Facility does not necessarily represent the response of a monopolistic industry. As will be discussed in a subsequent section on performance of the insurance industry, increasing losses and uncertainty concerning damage awards can generate the behaviour observed for these sub-markets even if they are competitive. It is more than a coincidence that the submarkets for which the Facility has become more important are areas in which there are high risks and the potential for high third party claims.

As an example of the kinds of problems that insurers face, it was reported in the Toronto Star that over the past three years $19 million in premiums were collected from the Toronto taxi industry and $38 million were paid out in claims. This makes writing insurance for taxicabs very costly. A related problem regarding long distance trucking to the U.S. forces a number of the truckers into the Facility. The court awards on bodily injury and property damage are very high in the U.S. and thus the expected claims are also high. Therefore, insurance companies have required these drivers to use the Facility.

The suggestions that the insurance companies' behaviour in this market reflects their monopoly power misses the important issue of potential competition from a number of sources. If the premiums charged by existing firms or the Facility are too high then a number of competitive responses are possible: these include entry into this sub-market by firms not currently engaged in writing policies for this market; entry of a new firm to serve the market; and the formation of a mutual company of individuals affected in the particular market. For example, if taxicab owners believe that they are being charged monopoly prices or not given adequate coverage, then they can set up an insurance company or facility which provides insurance at a lower price. In fact, the existence of a competitive reinsurance market would assist in this response to perceived monopoly pricing.

Therefore, provided there are no barriers to entry (and exit), monopoly pricing in a particular sub-market cannot be sustained. It is this potential competition that will force existing companies within the sub-market to consider whether or not the premiums charged will be sufficiently high to attract entry.

b) Small Towns

The second general area of concern is that sub-market composed of small towns. Here, it is alleged, that automobile owners are limited in their choice of insurance companies; the observation leading to this conclusion is that there may be only one insurance broker in a small town or perhaps an agent of a company that uses direct writing.

Casual empiricism suggests that the number of brokers in a small town is small; this represents the size of the local market. However, this does not necessarily imply that premium levels will be set at monopoly levels. Individuals looking for insurance coverage may find alternative coverage by shopping further afield to adjacent towns. Also, the broker who represents a set of insurance companies should be able to find those companies which provide the coverage at competitive prices. It may be that any problems in small towns may be more a result of the single broker in a town and not the state of competition in the automobile insurance industry.

2.2 Rating Bureaus

In the preceding section the conclusion was that the structure of the automobile insurance market in Ontario and in fact the insurance industry in general was consistent with a competitive industry. Perhaps monopoly elements can arise from cartel behaviour; one mechanism that has been suggested as a vehicle to assist in collusive behaviour is the rating bureau.

In an industry in which reliable information on claims experience is crucial for rate making purposes, the rating bureau can provide an important service. By pooling information on loss experience for a class of insureds or for a particular region, the credibility and reliability of the data are better than the observations of the claims experience of any one company. By pooling the information the random elements observed for any one company's loss experience are reduced or eliminated. Since the information must be collected over a number of companies and over a number of different risks, there is a necessity to have standardized products; to the extent that a product is unique to a firm or to a small number of firms, the pooled information may still not provide enough observations to eliminate random elements.

Not only does the rating bureau provide information but it also publishes recommended rates based on a particular formula. For example, the Insurers Advisory Organization publishes recommended rates for automobile insurance based on target expense and loss ratios. It is this combination of information provision and published rates which could lead to the conclusion that the rating bureaus facilitate monopolistic pricing.

This concern, however, does not appear to have any grounding in fact for a number of reasons. First, to be effective as a cartel/monopoly where the price is set above marginal cost so as to generate monopoly profits, there must be a mechanism to allocate market shares and ensure that members of the cartel do not cheat. There are no mechanisms of this type found in the rating bureau structure. Second, there is no requirement that the members of the rating bureau use the recommended rates. The companies may belong to the bureau to obtain the claims experience information which is then applied to their own rate making formula. Third, not all companies in the insurance industry are members of a rating bureau. Some companies are either large enough to generate reliable claims experience on their own or have access to this data from other sources.

Therefore, without any power to enforce cartel behaviour and collusive pricing, rating bureaus, such as the IAO, cannot facilitate collusion among insurers. One side effect of the rating bureau structure is that there may be an impact on innovation; since data is pooled on standardized products, small companies which cannot obtain their own reliable set of data on new products may be unwilling to innovate. However, this does not suggest that innovation in defining risk categories does not occur.

2.3 Barriers to Entry

The continued existence of a monopoly depends crucially on the ability of the monopolist or the cartel to deter firms from entering the industry. The entrant can charge prices just under those charged by the monopolist and earn above competitive profits. To the extent entry is inhibited either by the basic structure of the industry or by external factors, a monopolist can overcharge, underproduce and operate inefficiently relative to the situation in a competitive industry.

Freedom of entry is central to the concept of 'contestable markets' under which it is possible to have a competitive industry with as few as two companies. A contestable market is one in which there can be costless hit-and-run entry i.e., all firms, incumbents and potential entrants face the same costs; there are no sunk costs of entry; and entry can occur before incumbents have time to respond. These conditions result in the incumbent having no advantage over the entrant. If an advantage exists, there is a barrier to entry and there is the potential for a non-competitive solution. Given the large number of firms in the Ontario automobile insurance industry and observed entry and exit (see Section

III-2.3.c), it is unlikely that significant barriers to entry or exit exist. We now turn to the potential sources of these barriers and evaluate their importance.

Barriers to entry arise from two general sources: those that are imposed externally or due to the nature of the product and those that are inherent in the costs of producing the product. The former include:

i) government regulations concerning capital requirements

ii) sunk or irrecoverable costs of forming reputation

iii) brokerage system

iv) monopoly reinsurance market.

The latter include economies of scale which implies that per unit costs are smaller as output grows; also there are economies of scope where it is cheaper for a firm to write insurance in a number of lines than just in a single line. The findings on economies of scale and scope are of direct relevance to the issue of public versus private provision of automobile insurance.

A. External Barriers

i) Government Regulations

Regulations can inhibit entry by conferring advantages on the incumbents or increasing the cost of entry. Minimum capital and surplus requirements, securities deposits and a maximum ratio of premiums written to equity capital are the operable regulatory constraints.

There is no evidence that these requirements inhibit entry since they apply equally to new and incumbent firms. The minimum capital and surplus requirement of at least $1,000,000 is not a sum that is difficult to raise in the capital market.

ii) Sunk Costs and Reputation Effects

Incumbent firms in the industry have made significant investments in firm specific assets which are sunk costs.

These investments include the establishment of a distribution system, either using brokers or agents, initial market surveys to determine profitable market segments and the establishment of a reputation. The latter is important for a product in which it is difficult to evaluate the credibility of the supplier until the service is required. In the automobile insurance industry the reputation concerns the viability of the firm to service the clients' claims in the event this is necessary. The company makes investments in assets to signal that it is indeed viable. The investments include the costs to attract brokers, perhaps including reduced prices, and the costs of interesting brokers of good reputations to represent their product along with others.

While these investments in establishing a reputation are sunk costs to the incumbent, they are incremental costs to the potential entrant and if undertaken would be lost upon exit. The existence of these sunk costs suggests the possibility for a barrier to entry.

The significance of this factor in generating a meaningful barrier to entry is quite small for a number of reasons. First, the solvency requirements provide some guarantee of the credibility of the insurance company to pay claims. Second, new entry into the Ontario automobile insurance market can be accomplished by existing firms which have not written automobile insurance in Ontario but are established and known to agents and consumers through coverages written in other lines. These companies need not just be Canadian but entry can be by British or other foreign companies who already have the needed reputation. Third, reputation and signals of quality need to be directed primarily to the independent brokers and not the public. The former are familiar with the reputations of other companies writing in other lines.

iii) Brokerage/Agency System

The retailing function in automobile insurance is done either directly by the company using agents who sell only the company's product or indirectly through the use of independent insurance brokers. The brokers represent a number of insurance companies and their compensation in 1985 was approximately 11.5% of the premiums written. The brokers incur a number of costs in retailing the product; these include the general administrative costs of running the brokerage business, costs of servicing new clients -- insurance lapses and insureds, search for new companies; and evaluating and allocating insureds to the appropriate risk rating category. The continued representation by a broker of a particular insurance company will depend upon the broker's ability to classify correctly the insureds into risk classes.

Is the retail part of the business represented by the independent brokers competitive? If not, then premiums would be high to reflect non-competitive returns being earned by the brokers.

There are some indications that appear consistent with restricted entry into the brokerage area and hence a reduction in potential competition. The first indication of restricted entry is the powers assigned to the Registered Insurance Brokers of Ontario (RIBO) to interpret and administer the rules under the Registered Insurance Brokers Act. The RIBO have become a self-regulating organization. Many of the rules of the Act have the effect of reducing competition in the brokerage business. These rules include the prohibition of automobile dealers or perhaps even other financial institutions from offering brokerage services to their clients. Also, part-time employees are not permitted to act as insurance brokers.

The second source of restrictions on entry is the regulation of brokerage companies. These companies must have errors and omissions and fidelity insurance coverage; this is in itself not a barrier to entry. There are restrictions on advertising by brokers; this clearly confers a benefit on existing companies since an entrant will have a difficult time in becoming known. Finally, the majority of brokerage companies' shares must be held by registered insurance intermediaries although a "grandfather" clause exempts pre-1981 companies. This reduces the flexibility of entrants in raising capital.

Although these regulations appear to restrict competition, is this true? If brokers were earning monopoly returns, then we would expect to observe an increase in the use of direct writing through agents representing a firm unless direct writing were a more expensive alternative. Since both the brokerage system and direct writing coexist, we can conclude only that the costs of these alternatives at the margin are equal. This does not mean that the systems are efficient in the delivery of services.

iv) Reinsurance Markets

An important element in the insurance industry is the market for reinsurance. This market facilitates entry, exit and risk bearing by purchasing insurance contracts from firms that write them or buy re-selling contracts to firms that wish to increase the number of policies they hold. If the reinsurance market is competitive, then new firms can enter and sell insurance and then reinsure. A monopoly reinsurance market would purchase insurance contracts at a monopoly price and an entrant would be unable to compete with an existing firm which does not use the reinsurance market heavily.

An analysis of the automobile reinsurance market suggests that while it is more concentrated than the automobile insurance market, the structure is consistent with a competitive industry. The concentration ratios are as follows:

C_4 : 46.89%

C_8 : 67.59%

C_{20} : 92.65%

H : .0805

Number Equivalent: 12.4

The Herfindahl index is sufficiently close to zero to be consistent with a competitive industry; and the numbers equivalents suggests that collusion would be difficult to initiate and maintain.

B. Internal Barriers

i) Economies of Scale and Scope

a) Theory

The cost structure of the industry will have a crucial influence on the number of financially viable firms and on the state of competition in the industry. Consider a one product industry where the cost conditions are such that as the output of a firm increases the average cost (i.e., total cost per unit of output) falls. If the average costs continue to fall as output increases then only one firm will exist in the industry. Any firm which enters and has a lower output than the incumbent will face higher costs and thus will not be viable. This is an example of a market failure described as a natural monopoly; only one firm will survive since it can always produce more cheaply than the entrant. This natural monopoly argument is often used as a rationale for rate regulation of an industry or for the establishment of a government monopoly through a Crown Corporation.

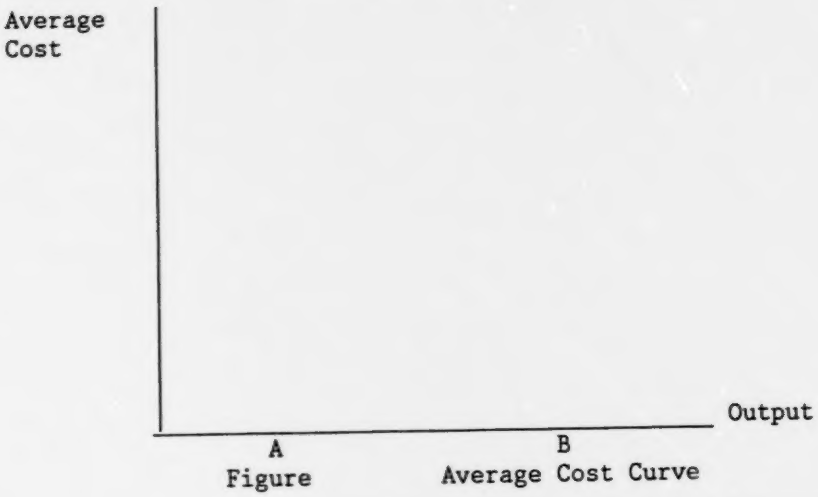
The cost conditions associated with a natural monopoly are the exception, not the rule. Under normal circumstances the average costs will decrease as output increases, then level off, and perhaps rise as output subsequently increases. The average cost curve is presented in Figure 2. The output value labelled A is called the minimum efficient scale (MES). It represents that minimum level of output at which average costs reach their lowest point. New entrants, in order to avoid a competitive disadvantage, would want to enter at outputs no smaller than A. Notice that between points A and B firms of different sizes have the same average costs; therefore the industry will have viable firms of different sizes. However, the cost structure of the industry would suggest that firms do not want to have outputs greater than B. It is possible that there is no point beyond which average costs increase and the cost curve would not place a limit on firm size.

The 'barrier to entry' here is the minimum efficient scale and in some industries this could be large relative to the size of the industry. As we will see in the subsequent sections, the result of the empirical analysis and the observed entry experience in the Ontario automobile insurance industry suggest that the MES is not a barrier to entry.

Economies of scale refer only to the impact on average costs as the output of a particular product increases. However, many firms produce multiple products or even if only one product is made, the firm may produce different qualities of the product. In these instances economies of scale become difficult to investigate since there may be interactions among the production processes of each product and any fixed costs can be spread over more products, each of which may be produced in small quantities. This is an alternative to the spreading of fixed costs over larger output size as with economies of scale.

FIGURE 2

Average Cost Curve



The interactions among products is referred to as economies of scope. Economies of scope are said to exist if the marginal cost of producing a particular product is affected by increasing the output of another product. Thus, an increase in output of one product or even the introduction of a new product will reduce the marginal cost of producing another product. In the insurance context the marginal cost of writing more automobile insurance coverage depends upon the existence of other lines of insurance. Also, entry into the automobile insurance line may reduce the costs in other lines. The interactions result in a firm choosing not only the product mix but also the output within each product. If economies of scope do exist, then the removal of a particular line of insurance will increase the cost of producing insurance in other lines as well as increasing the costs of producing in the line which is separated.

b) Empirical Evidence

An investigation of economies of scale was undertaken in the Potvin study using the conventional analysis of relating the total costs of providing insurance to the net premiums earned in the automobile, personal and commercial lines of insurance. The sample reflects companies which typically write in more than one line of insurance. The total cost of the entity is equal to the sum of agency costs, claims settlement and processing, underwriting and policy processing and general administration.

The econometric model attempted to find whether there were economies of scale in the three insurance lines identified above. In addition, the analysis identified whether there were any fixed costs that could be spread over lines or larger outputs. With fixed costs, the average cost will decrease as outputs increase.

The econometric model was unable to detect economies of scope or economies of scale in the automobile insurance line. The test concerning economies of scope is somewhat restricted since it did not take into consideration the influence of increasing output in one line on the costs of providing insurance in another line.

The observed entry experience in the automobile insurance industry is consistent with there being no economies of scale in automobile insurance. However, the existence of multiple line insurance operations suggests the presence of economies of scope.

There are some methodological criticisms of the use of cross-sectional data of costs and output to estimate cost functions and derive economies of scale. The criticisms refer to the use of accounting data combined with random variability in output. These models result in finding economies of scale where none exist.

A methodology which corrects for these problems was used in a paper by Halpern and Mathewson. The paper uses data which is dated (1965 to 1969) but given that the industry structure has not changed dramatically since then, the results should be indicative of the underlying structure of the industry.

Some of the results of direct relevance to the issues considered in this report are as follows:

i) no significant economies of scale exist for either joint stock or mutual companies in automobile, fire and residual lines.

ii) no significant economies of scope exist for joint stock companies, but they do exist for mutual companies when jointly writing additional automobile and combined fire - personal injury.

iii) both types of firms realize cost savings by increasing the number of lines of insurance that they write. This is a gain obtained through more effective risk diversification by writing across lines whose claims experience is not perfectly correlated.

Therefore, these results combined with those from the cost curve regressions suggest benefits may exist from multiple line writing but not from increases in the size of any one line of insurance. This implies that there is no cost or natural monopoly justification for establishing a government-owned monopoly in the Ontario automobile insurance. In addition, by setting up the single line monopoly seller of automobile insurance, any gains from economies of scope will be dissipated; this would result in an upward pressure on expenses and premiums for the Crown Corporation.

C) Entry and Exit Experience

From the analysis of the external and internal barriers to entry, it appears that any barriers that exist are minor and will not have any impact on entry or exit. Therefore, the influence of actual or potential entry will be sufficient to generate competitive pricing in the Ontario automobile insurance industry. Also, since economies of scope and not scale predominate, entry of all sizes is likely to be observed.

Empirical evidence presented in the Potvin study on observed entry and exit in the Ontario automobile insurance market is consistent with the absence of barriers to entry. Over the period 1975 to 1984, 67 groups entered this market while 87 left. Entrants' size, on average over the period, as measured by direct premiums written, was $1.5 million with a large range over the years; for exit, the average size was $1.1 million but the range was smaller. Looking at the number of entrants, the annual average for the period was 6.7 groups for entrants and 8.7 for groups departing the industry.

With the small entry size, it is very likely that any fixed costs that had to be covered were already covered through operations in other lines of insurance or in other jurisdictions.

2.4 Performance

Having observed the structure of the Ontario automobile insurance market and drawn some conclusions, we now turn to the issue of the performance of the industry. Performance is evaluated to determine whether it is consistent with competitive or monopoly behaviour.

The conventional measures of performance cannot be used, unfortunately. Normally profit rates on equity of the firm are evaluated, however, most firms writing automobile insurance in Ontario also write across Canada and are involved in other lines in Ontario as well as in the rest of Canada. Therefore, the observed profit rates on equity of the firm do not reflect competitive conditions in automobile insurance but in all of the lines. A further problem is that the companies have different product mixes and hence it is difficult to pull out the contribution of any one line. Finally, there are a number of common costs that would have to be allocated arbitrarily in order to measure profitability by line. Due to these problems, a different approach will be used.

First, there will be an analysis of performance at an Ontario aggregate level. Performance will be evaluated by determining whether the increases in premiums observed over the recent years are justified by underlying cost considerations. In this analysis a comparison of Ontario and other provinces with private insurance industries will be undertaken.

An implication of a competitive market is that the underwriting profits adjusted for imputed investment returns on premiums should be, on average, zero. This arises since in a competitive industry, the premium charged to the insured will reflect an imputed riskless rate of return. These adjusted underwriting profits are evaluated and found to average zero.

The results from these analyses at the aggregate level are that the performance of the industry is consistent with the competitive model. The increases in premiums in Ontario both in absolute value and relative to other provinces reflect the basic underlying differences between the jurisdictions. The major difference among the provinces is the very large increase in third party liability average costs per vehicle insured in Ontario relative to the other jurisdictions.

The second approach is to evaluate performance at a disaggregated or firm specific level. Although we will not investigate premium setting policies for individual companies, there are some implications from the competitive model described in Section III-1 and standard competitive theory. First, the premiums will reflect the marginal cost of providing service. The insurance market is really a collection of sub-markets each of which differ in their risk and hence in the cost of providing service. In a competitive industry, the market participants will attempt to find reliable variables to distinguish among the insureds so as to price according to risk. Therefore, one implication is that in the competitive market there will be a complex and costly method of sorting insureds into the appropriate risk class; premiums will then be based on these risk levels. Second, the premiums charged for a given risk class will not be the same across firms. The actual premium depends upon the expense ratio, expected loss ratios and expected profitability from investment; the values of these variables need not be the same for each company even within the same risk class. In fact, companies may try to subdivide a particular risk class and write insurance only for the less risky in the class; this results in a lower premium than for firms which do not distinguish among participants in the risk class.

The observed spread of premiums across risk classes and even within a risk class across companies and the complexity of the mechanism to sort insureds is consistent with a competitive industry. In fact, only a monopolist which could prevent entry would be able to charge a single price for insurance; the publicly-owned system would be an example. By charging an average price for insurance, the lower than average risk groups subsidize those that are riskier than average. In addition, there is a perverse incentive to encourage risky drivers and discourage drivers that are less risky than average. More on this topic will be presented in part B of this section.

A. Aggregate Performance

i) Claims Costs

As noted in the description of the basic insurance policy, there are three parts -- third party liability (bodily injury and property damage), personal accident benefits, and collision. Each element has claims associated with it and there are significant differences in the time pattern of each of these claims.

The loss ratio (direct losses and adjustments divided by net premiums written) for the total product has increased drastically in Ontario from the 1981 value of .845 to the 1986 value of 1.003. Since the collision loss ratio has been reasonably stable and the loss ratio for personal accident, although increasing, is such a small portion of the total product, any increase in the overall loss ratio reflects the influence of third party liability. The loss ratio for the BIPD element increased from 88.3 in 1980 to 123.3 in 1985.

This pattern for the elements of the standard policy in Ontario appears to be replicated in other provinces with private insurance schemes. The BIPD element grew fastest in Ontario but other provinces are catching up.

The implication is that premiums levels must increase to reflect the increasing losses. This increase is not to provide retroactive compensation for past losses but to reflect expectations of future losses. Any attempt by a firm to increase premiums above a competitive level to recover past losses will induce entry; the result would be pressure to reduce premiums to the competitive level.

Another way to view this issue is to look at the pure premiums for each element of the policy and for the overall policy for Ontario and other private insurance provinces. The pure premium for a coverage classification is calculated as the product of the frequency of a claim in a particular coverage classification and the average cost of settling a claim in that class. This product reflects the expected claims cost for the coverage class and is one element in setting the premium. Note that the premium not only must also include expenses and an imputation for investment income and the current expectations of claims frequency and claims costs. Using the observed values of these latter two variables gives an historical pure premium. Unless current expectations are equal to historical values, the expected pure premium will differ from the historical value. Since expectations are built on historical experience, the historical pure premium will provide information on the reason for an increase in premiums.

In all the provinces investigated, claims frequency for BIPD, personal accident benefits, and collision have not changed over the period 1982 to 1986. In terms of claim frequency, Ontario has either the highest or among the highest in all three elements of the policy. For example, for third party liability, the Ontario frequency is 5.8%, i.e., 5.8 cars out of 100 each year will be involved in an accident resulting in a BIPD claim.

The claims cost element, however, has undergone major changes over time. In Ontario the claims cost for third party liability increased by 70% from 1982 to 1986; personal accident and collision both had more modest increases over the same period. In terms of actual claims costs, for the average over the period 1982 to 1986, Ontario had the highest value of $4126 in BIPD, the highest (excluding Quebec) of $2242 in personal accident benefits and the lowest in Canada for collision. The latter could reflect the size of deductibles which may differ in Ontario relative to other provinces.

To highlight the problems faced by the automobile insurance industry, consider Table 2. Here the pure premiums for Ontario, Alberta and Nova Scotia are presented for the three coverages. Two values are presented for the pure premium -- the value based on the 1982-6 average and on 1986 alone. From this table it is observed that the major contributor to the large size of the pure premium in Ontario is the third party portion. Based on the average experience, the Ontario pure premium is approximately $90 above the value in any other province; for 1986 the comparable value is $110.

TABLE 2

Pure Premiums

Average 1982-6	Ontario	Alberta	Nova Scotia
Third Party	$238.1	$150.2	$120.6
Personal Accident	27.0	9.1	8.7
Collision	101.8	111.5	112.7
Pure Premium - Average	$366.9	$270.8	$242.0
Pure Premium - 1986	442.1	318.9	296.3

Based on this average experience over all risk categories in a province, it appears that in Ontario premiums should be higher to reflect higher expected loss costs. Any differences in the growth in premiums across provinces is most likely due to the relative growth in the claims costs for third party.

The BIPD element has grown dramatically in line with the increase in the size of court awards. Even though the Supreme Court of Canada in 1978 capped the pain and suffering awards at $100,000 (inflated), there have been a significant number of court cases which resulted in large (by Canadian standards) payouts.

In addition to the actual awards, there is the expectation that awards will continue to rise and that the frequency of cases with their attendant court costs will increase with enabling provisions in the Ontario Family Law Reform Act. Finally, gross-up provisions for income tax liability have increased the size of the awards relative to structured awards with annual payouts. It has been suggested that in a lump sum award of $7 million, $3 million is the provision for income tax.

Given the uncertainty of the direction in which courts will move in terms of awards, along with the other factors noted, a rational and competitive insurance company will increase its expectations of claims costs and hence increase its premiums. Since the premiums are based on expected claims costs and changes in expectations need not be related dollar for dollar with realized claims cost changes, the increase in premiums can be greater than the observed increase in observed claims costs.

A recent decision in the Manitoba Court of Appeals resulted in the reduction in an award to $771,000 from $2.2 million. This decision generated a substantial amount of debate and whether or not it is a harbinger of reduced future awards cannot be determined at this time.

Finally, the high Ontario claims costs on BIPD are reflected in premium rates on interprovincial buses or trucks which operate in Ontario but are insured in other provinces. In order to reflect the higher expected pure premium resulting from operations in Ontario, a higher premium is charged, even though the main operations of the insured vehicles are in provinces other than Ontario.

ii) Expense Ratios

Another element in setting premiums is the expense ratio which reflects the fixed and variable costs in writing insurance. In identifying expense ratios for automobile insurance alone, there is a serious problem of allocating common costs for firms that write in more than one line of insurance. Any allocation must be arbitrary.

The expense ratios for 1985 are compared for all provinces which have private automobile insurance. The expense ratios include agency acquisition expenses, underwriting policy processing, claims settlement and external adjustment for underwriting settlement and adjustment. For all provinces the total expense ratio was approximately the same with a value of about 36%. Although there are some provincial differences observed in the size of each component in the overall expense ratio, these are not substantial. Therefore, expense ratios do not contribute to different premiums across the provinces.

There is one interesting implication of the use of expense ratios in setting premiums. By applying a constant expense ratio to an increasing premium, the implied expenses associated with the policy increase. Thus, it appears that higher risk policies have higher expenses. While this may be true since agents or brokers need to make a more in-depth evaluation, it is unlikely that the expenses increase in proportion. It is more likely that there is a fixed cost element. A direct estimate of the expenses may be preferable to the use of the expense ratio.

iii) Underwriting Performance

The final aspect of performance is the value of the underwriting income. As identified in the insurance model in Section II-3, there should be an attribution of investment income to the underwriting profit or loss to reflect the fact that in a competitive industry the insured should earn a return on money invested when acquiring a policy. The imputed return is the risk-free rate since there is no systematic risk in the automobile insurance industry. With the imputed return taken into account, there should be a zero rate of return on the underwriting part of the insurance business.

The Booth paper provides a methodology to measure the imputed investment income. In Table 3 below the overall underwriting performance for the Ontario automobile insurance industry is presented. This is only a rough measure since the investment income is based on the results for all casualty companies.

Looking first at the underwriting profit we observe that the average value was .005 or a loss of 5 cents per $100 of premiums. The values in 1981 and 1982 were high, about 7 to 9 cents, but have fallen dramatically in 1984 to 1985 where losses are observed. The losses are from a combination of sharply increasing loss ratios and reduced investment income as interest rates fell. The increased claims ratio suggests that the firms were surprised by the size of the losses and premiums were set too low. Another explanation is that interest rates were high and premiums were reduced to reflect imputed return to policyholders.

In the 1981-2 period substantial investment income was earned with high nominal interest rates, which would keep policy premiums down. But as time passed the interest rates fell and this, along with increased loss ratios, resulted in poor overall performance.

To conclude this section, the industry appears to exhibit behaviour that is consistent with a competitive industry. The overall underwriting performance over the 1982-85 period is negative and small on average although variation over time in this profit can be substantial. This reflects the major differences that can arise between expectations and realizations of the crucial variables. Also, overall premiums were consistent with the underlying structure of expected costs. Throughout the period, there was no influence on profits or premiums from changing expense ratios.

TABLE 3

Elements of Performance - Automobile Insurance

	1981	1982	1983	1984	1985	Average
Claims or Loss Ratio	.845	.805	.839	.952	1.007	.890
Expense Ratio[a)]	.246	.242	.250	.259	.243	.248
Investment Income[b)] $/NPE	.159	.133	.113	.132	.120	.131
Net Underwriting Profit(Loss)	.068	.086	.024	-.079	-.129	-.005

[a)] Expense ratio excludes all claims adjustment expenses.

[b)] Imputation based on Casualty Insurance statistics.

Source - Booth Table 12.

B. Rate Making

i) Competition and Rate Structures

At a conceptual level the premium charged for insurance coverage should reflect the insurance company's expectations concerning the losses to be incurred on the policy, the expenses both fixed and variable, and the investment income derived from the premium. In most cases, the expenses and investment income are independent of the identity or characteristics of the insured. However, losses need not be.

These expectations of losses are formed by observing previous experience and incorporating any indications of changes. Since the interpretation of events that may affect expectations can be unique to an insurance company, the expectations need not be homogeneous across insurance companies.

In the previous section it was observed that actual premiums had as an important ingredient the observed pure premiums, however, these were considered on an aggregate basis and any insurance premiums derived from these pure premiums would reflect the average risk and loss experience for the province.

In a competitive industry, pricing 'on the average' will not exist. For example, suppose there was only one company in the province which wrote insurance based on the average experience. The premium is $500 per insured. Suppose entry is not blocked and another company decides to enter the industry. Based on historical data for loss ratios and on common sense, the company believes that farmers are less risky as a group than the provincial average. In fact, at a premium of $300 the company could write policies to farmers and earn at least a normal return for the risk it accepts.

The company, when it offers coverage at $300, will attract a large number of potential insureds. By using a pre-determined set of criteria, the company sorts insureds into those of the risk class that it is willing to accept and all others. The remaining insureds will stay with the original company at the $500 premium. However, the remaining insureds are now riskier than the previous average since the low risk group has been removed. The company will have to raise its premium or it will lose money. This process of sub-dividing the original market into equivalent risk class sub-markets will continue until the incremental cost of sorting individuals into a new class exceed the benefits (profits) of writing insurance in the new class. In equilibrium, insurance premiums will reflect the expected pure premiums for each risk class along with the expense and investment income ratios.

A good example of this process occurring in the Ontario insurance market can be observed in the writing of taxi insurance in Toronto. Due to the very high loss ratios (approximately 2.0) and the large number of BIPD claims, taxicabs have been insured by the Facility Association at a premium of $7,500. One company, the Co-operators General Insurance Company of Guelph, believed that it should assist the taxicab co-operatives. By setting premiums below the Facility premium they obtained about 40% of the market. This exposure to the Toronto taxi market is greater than the company expected or wanted. In fact the company is now in the process of determining whether the taxi co-operatives receiving insurance are truly co-ops.

It is crucial to this process that the insurance company be able to sort risks effectively; the data used must be reliable, verifiable and not under the control of the insured. Thus information such as asking how fast an individual drives is not very useful since the insured, in order to minimize the premium, may lie. The information obtained should act as a signal of the driver's risk; it should be a signal that cannot be altered to provide incorrect information about the insured's risk.

The result of this search for risk classes is a complex structure for risk rating. It includes a number of variables such as age, sex, number of years of claim-free driving, etc. In addition, brokers and agents have some influence on the risk rating of the individual using data that may be unique to them. Of course, with this decision-making ability comes responsibility; to the extent that the brokers rate insureds incorrectly, the companies that they represent may not continue using them.

This system of risk rating, while it is costly, has a significant number of benefits. First, the insured pays a premium which covers the expected costs imposed on the company and on society. This provides incentives to insureds to alter their driving behaviour in order to place them in a lower risk group and hence a lower premium. For the very risky drivers, the premium level may actually keep them off the roads; these individuals are faced with insurance premiums that are in excess of the value they derive from driving. Included in this high risk group will be teenage male drivers whose loss experience is the highest of all groups.

Another beneficial aspect is the incentive to private insurers to innovate and find new methods of classifying individuals more effectively or of finding new rating classifications. The lure of profits, by being the first company to identify risks more effectively, ensures that an unregulated, private insurance industry will continue to innovate.

ii) Rating Structures and Risk Categories

Having identified the response of a competitive industry in which there are no barriers to entry with respect to risk rating and premium setting, we now consider whether the signals chosen do discriminate among risk classes and should premium levels differ by risk group. Instead of looking directly at the insurance premium charged, and there will not be a single rate for each category for all companies, we consider the size of the pure premiums based on widely used classification schemes.

The pure premiums for various risk groups, as identified by a set of signals, are well documented in the Booth research; his conclusion is that the levels of pure premiums do indeed differ by risk class and that the classification scheme appears to discriminate among risks.

For example, looking only at Ontario, one would expect that a simple signal is whether or not the insured drives in Toronto. Using 1986 loss cost data, the Ontario-wide pure premium was $442.06; the Toronto value was $560.04 and included 31% of insureds; the Kenora value was $293.02 and the value for the farmers' category was $253.36.

Therefore, premiums should be different for these categories since they impose different expected costs on the insurance industry.

Essential to the risk classification is the existence of sufficient numbers of observations in each category to make pure premium numbers reliable. The categories presented for Ontario are not fine enough to permit premium setting, yet any finer gradations will not provide enough observations. To get around this problem, Canada-wide data are analyzed and broken down into finer risk classes.

In Figure 3 below one particular breakdown is presented along with the number of insureds and the pure premiums. The observations are, in general, consistent with differential premiums based on risk-based pure premiums. The risk classes chosen are intended only to illustrate the concept.

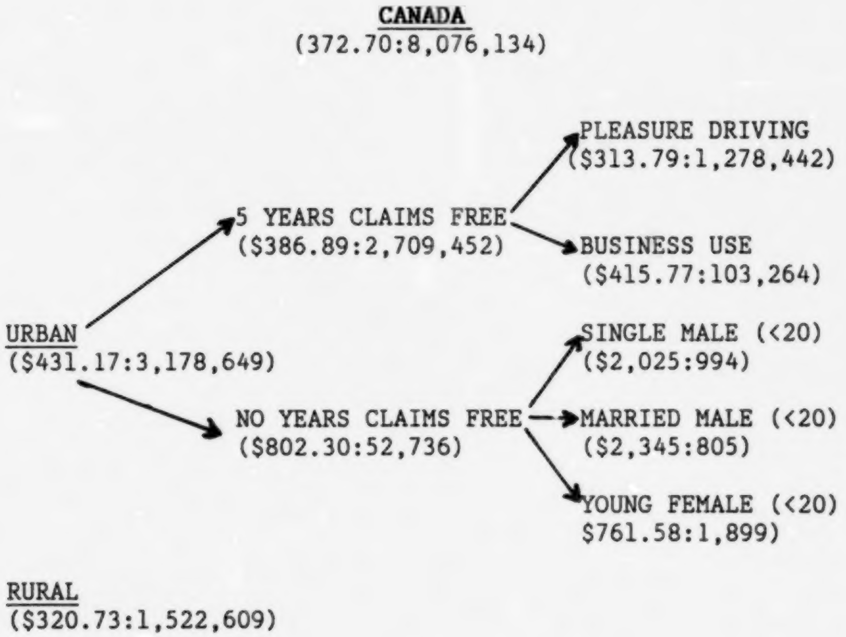
Clearly the urban/rural split is crucial in defining a risk class since the pure premiums are much higher for the urban insureds. Another signalling device is the number of years of claims-free driving. Looking at two extremes it is observed that the pure premium for five years of claim-free driving is much lower than the value for no years. Notice that the numbers in the latter category are much smaller -- 52,736 versus 2.7 million in the claims-free 5 year category.

Age and sex are also variables used to discriminate or signal among drivers. If we consider young drivers with no claims free experience, we observe that the pure premium for males under 20, whether single or married, is over $2,000! The value for females under 20 is $761; the use of sex seems to be an important distinguishing risk feature for young drivers.

The sample sizes for these three categories are quite small and the claims experience in any one year could be affected by a small number of large claims. Therefore, experience over a number of years would assist in distinguishing the random elements from the true underlying value of the pure premium. The observations for young drivers is robust over a number of years. The conclusion is obvious; young male drivers are risky, have high claims experience and should pay insurance premiums that reflect the expected costs they impose on the system.

To obtain some corroborating evidence on the pure premiums by risk class, the U.S. experience was also evaluated. The results are consistent with the Canadian observations with respect to all the important rating signals used to allocate drivers to various risk classes.

FIGURE 3


CANADA
(372.70:8,076,134)
PLEASURE DRIVING
($313.79:1,278,442)
5 YEARS CLAIMS FREE
($386.89:2,709,452)
BUSINESS USE
($415.77:103,264)
URBAN
($431.17:3,178,649)
SINGLE MALE (<20)
($2,025:994)
NO YEARS CLAIMS FREE
($802.30:52,736)
MARRIED MALE (<20)
($2,345:805)
YOUNG FEMALE (<20)
$761.58:1,899)
RURAL
($320.73:1,522,609)

Therefore, the Ontario automobile insurance industry pricing practices are consistent with a competitive industry. The search for profits leads firms to innovate and attempt to identify risks more accurately. The necessity to test potential new classification schemes against observed loss experience can result in a gradual introduction of some innovative techniques.

iii) Rate Making and Fairness

It has been suggested that the risk rating practised by private firms is unfair since it puts individuals into a risk category and individuals within this group may not be all of the same risk. Of course, if there are discernable sub-groups in a rating category, a competitive automobile insurance industry will try to identify them provided the costs of so doing are not too large. As the criticism goes, a 'fair' position would have fewer distinctions in rating and more cross-subsidization. The ultimate impact is that insureds would not be charged based on their expected cost to the system.

We do not want to become involved in a discussion of fairness; instead we will look at the implications of a system which does less risk rating.

An example of the movement to a 'fair' rating system is the setting of premiums for teenage drivers with no driving experience. The B.C. public insurance company originally risk rated young drivers and charged premiums based on the expected loss costs of the group. However, it was decided that this method assumed that all new teenage drivers were equally risky and this was not true. The solution was to charge all new teenage drivers the same premium but one which does not cover the expected losses for the group. As the teenager obtains a driving record, surcharges for claims experience, etc. will be charged. Thus the teenager eventually is rated properly.

Since the new teen driver does not pay premiums to cover his or her group's loss costs and given that the losses will be incurred, on average, then all other insureds are subsidizing new teenage drivers. Since the number of new teenage drivers is small, the cost of the subsidy to each lower risk driver when spread over all other drivers is very small.

Could this type of rating structure exist in a private automobile insurance industry? As long as pricing is unconstrained, the private company must base its premiums on expected losses and would be unable to cross-subsidize. As long as entry is possible, a cross-subsidy cannot continue. The only way a cross-subsidized rate structure could continue would be to have strong regulation which defines acceptable risk classes and the associated premiums.

The implications on accident rates has already been discussed in the context of setting a premium which does not reflect the cost imposed on the system. In the teenage automobile insurance example the result is there are more teenage drivers and given their proclivity for accidents, more accidents and deaths. By having premiums reflect the expected loss costs, many teenagers could not afford to drive and hence accidents would decrease.

In addition there is a wealth redistribution from the less risky drivers to the risky new teenage drivers. It is true that this amount is small per non-teen insured but the dollar amount may be sufficient to force a low risk individual to cease driving because of financial reasons.

IV. EFFICIENCY COMPARISON: PRIVATE VS. PUBLIC DELIVERY

In the debate on public versus private ownership of the automobile insurance industry, each side has generated 'empirical' evidence on the relative efficiency of each system. In many cases, this empirical evidence is mixed with philosophical or political influences. In this section the performance of the Ontario private system is compared with that of the three provincial systems.

In these comparisons, we omitted consideration of the Province of Quebec. Since the Quebec system includes no-fault as well as public ownership aspects, therefore if efficiency differences were observed, it would be impossible to relate them exclusively to the public delivery element; the no-fault aspects of the system may be the true reason for the observed differences.

Empirical analyses in this area usually take the form of comparing premiums for a particular policy in Ontario and in the public systems. If it is found that the public system can provide the same policy to the same individual cheaper than the private system, the conclusion is that the public system is more efficient.

Comparisons like this are frequently misleading and at best are illustrative. It is only when all factors are held constant that any premium comparison will make any sense. It is the conclusion in the Booth study that it is difficult to keep the other factors constant.

In this section we present the results of the Booth study. It is concluded that although it appears that the public systems have lower expense ratios, this is not due to economies of scale but to a decision not to engage in the costly process of risk rating to any great degree. The resulting cross-subsidies can explain a number of the observations where high risk drivers have lower premiums in public than in private systems. Ignoring the possibility of subsidies in the public system, the introduction of a public system which has no risk rating and substantial cross-subsidies of risky drivers by less risky drivers will reduce the overall premium level by about 6.5%. However, for a number of reasons, this estimate is very likely to be too high and it is possible that premiums will increase.

1. Caveats re Comparisons

Before undertaking any of the analysis, the limitations in the comparisons of public and private systems must be understood. At this point, the problems will just be identified; their impact, if any, will be investigated in more detail in a subsequent section.

First, there are problems in obtaining data for the public systems; the data are sketchy and are usually found in the annual reports. Second, the public companies operate under a different set of constraints. Even the public companies operate differently amongst themselves, with the B.C. insurance company having operations closest to a private company. Third, the public systems do not pay corporate tax and in one case (B.C.) did not pay premium taxes. Fourth, many of the inputs of the public system are acquired from the government at less than competitive rates. Finally, the basic coverages of the public and private systems insurance policies are different.

All of these differences can have an important impact on the interpretation of the results identifying the relative efficiency of public and private systems.

2. Performance of Public Plans: Elements of Premium Setting

2.1. Regional Differences and Premiums

In a previous section we identified a major element in the premium to be the expected loss costs per vehicle. When considering the Ontario results we observed differential loss costs among the regions of the province. Rural loss costs were less than urban, and Toronto seemed to have the highest costs. This regional element in premiums should carry over to the comparison of public and private systems.

Realizing that the public system numbers reflect total vehicles insured, not passenger vehicles as in Ontario, and have different coverages, the loss cost statistics do provide some interesting observations. First, the loss costs for Ontario farmers and the total of Saskatchewan are very close -- 1985 values were $241 for Ontario and $228 for Saskatchewan. Even though the Saskatchewan results include some urban areas, overall its coverage would be most similar to the Ontario farmer classification.

The overall Ontario loss costs (which exclude farmers) for 1986 and 1985 are higher than all provincial systems. However, comparing Ontario and British Columbia we observe that over the period 1983 to 1986 Ontario loss costs were about 5% higher than those in British Columbia.

The loss cost data suggest that the primary cost for car insurance rates within a province can be explained by the pattern of regional variation reflected in urban/rural and farmer/non-farmer mixes. To the extent that provinces differ in this dimension, the average loss costs will differ.

Using the loss costs and the observed loss ratios by province, a schedule of provincial average premiums was constructed. It should come as no surprise, nor should any non-competitive or relative efficiency conclusions be made from the observation, that over the period 1982 to 1985, the average premium for Ontario at $389.16 exceeded those for British Columbia ($361.70), Manitoba ($274.76) and Saskatchewan ($228.63).

2.2. Claims Ratios

The claims ratio provides an indication of the dollars paid out, including claims adjustment costs, per dollar of premium. Since the private system premium must include an allowance for income tax, the private system's ratios will tend to be smaller than public system ratios even if they had identical claims experience.

From Table 4, it is observed that for the period 1982-5, Ontario had the lowest claims ratio and the primarily automobile insurance writers average claims ratio was even lower to reflect the fact that they write in provinces other than Ontario which has had the greatest increase in claims costs. The pattern remains the same for those systems which have data available for 1986.

TABLE 4

Average Claims Ratio

Time Period	Sask.	Man.	B.C.	Ont.	Primarily* Auto Writers
1982-1985	.959	.959	.998	.901	.801
1982-1986	N/A	.995	1.013	N/A	.833

*Five companies which wrote more than 70% of their total insurance in the automobile line.

2.3 Expense Ratios

The second element in setting premiums reflects the expenses incurred in the areas of processing claims, administration of the system and commissions to agents. Since there are no economies of scale involved in the writing of automobile insurance, differences in the expenses per dollar of premium will not be a result of size of the public compared to individual private firms. Therefore, if lower expense ratios are observed in the public plans, their explanation lies in some other area than size. In Table 5 the expense ratios for the three public insurance companies are presented for the period

1982 to 1986 and for 1985. In 1985 the Ontario companies were the subject of an expense allocation program of the IBC.

TABLE 5

Expense Ratio

	1982-86 (Average)	1985	Excluding Premium Taxes	
			1985	1986
British Columbia				
Claims Adjusting	9.1	8.7		
Administration	8.3	9.8		
Commissions	6.6	6.8		
Total	24.0	23.3	23.3	24.6
Manitoba				
Claims Adjusting	10.7	10.8		
Administration	4.3	3.6		
Commissions	4.7	4.7		
Premium Taxes	3.0	3.0		
Total	22.7	22.1	19.1	20.8
Saskatchewan				
Claims Adjusting	8.5	8.5		
Administration	8.2	9.8		
Commissions	.9	1.2		
Premium Taxes	3.7	4.0		
Total	21.3	23.5	19.5	17.0
Ontario				
Claims Adjusting	N/A	11.2		
Administration	N/A	9.4*		
Commissions	N/A	11.5		
Total		32.1	32.1	N/A

*Excludes premium taxes.

In interpreting these results, there are a number of caveats to keep in mind. First, for Saskatchewan, Manitoba and for British Columbia up to 1984, the public plans were involved in writing in a number of lines. Thus common costs must be allocated arbitrarily. This can lead to unreliable results. For example, in the Saskatchewan results, the administration expense ratio dropped by 4.7 percentage points from 1982 to 1983 and the opposite movement occurred in this element of the expense ratio in their general insurance operations. Second, we will see in the next section that over the period in question the premiums charged in Saskatchewan were too high. Thus any ratios which use these premiums in the denominator will be too low. Third, it has been suggested that there are a number of expenses that are covered by private firms which public firms do not meet. These include the payment of competitive rates for the provision of government services and use of facilities. In addition, these plans do not appear to pay the $5 fee levied on Ontario firms for accessing provincial driving records. These missing elements are impossible to cost. Whether or not this is a subsidy to the public plans will be considered in section IV-3 below.

Several observations are made from the results of Table 5 with respect to each element of the overall expense ratio:

i) Claims Adjusting

For the public plans, this ratio ranges from 10.7% to 8.5%. As noted previously, the value for Saskatchewan is likely to be too low. The Ontario value of 11.2% is slightly above the values in the public plans; the difference is reduced somewhat by removing the 1.3% overhead allocation included in the Ontario value. Moreover, there appear to be no significant differences in the claims adjusting ratios among the public and private plans.

ii) Administration

The Ontario value of 9.4% is higher than the public plan 1985 values of 7.8% for B.C.; 3.6% for Manitoba and 9.8% for Saskatchewan. The Saskatchewan result is not directly comparable since it includes the costs for administering the driver and vehicle licensing system.

The result is that the Ontario private system has higher administration expenses than the public plan.

iii) Commissions

The 1985 value of 11.5% for Ontario is well above the values for the public plans of 6.8% for B.C., 4.7% for Manitoba and 1.2% for Saskatchewan. However, there are large differences in this ratio among the public plans. The explanation of these differences may also identify why the Ontario results are so high.

iv) Premium Taxes, Licences and Fees

The public plans and the Ontario companies must meet different levels of premium taxes; these range from a high of 4.0% for Saskatchewan to a low of 0% for B.C. The Ontario value is 3.4%. Since they are mandatory, they should be excluded from any discussion of the overall expense ratio.

v) Overall Expense Ratios

After removing the premium taxes, the values for 1985 shown in Table 5 are 19.1 for Manitoba, 19.5 for Saskatchewan, 23.3 for B.C. and 32.1 for Ontario insurers. The major difference arises from the commissions ratios and a minor amount from administration expenses.

One possible explanation for these differences is that the public plans have indeed found a way to operate more efficiently. If this is true, then the expense ratios on their other insurance lines should also be low and in fact lower than ratios for private companies involved in multiple line writing. Booth considered this issue directly by investigating their expense performance in the general insurance areas and found two striking observations. First, expense ratios in total and in the administration and commissions area were much higher than the automobile results. Second, the expense ratios compared unfavourably to the non-auto expense ratios for private companies. Therefore, we must look to another explanation for the lower automobile expense ratios for public compared to private plans.

The obvious saving is that public plans do not rely as heavily on the agency system as the private companies and hence minimize this set of transactions cost. However, in private delivery, the agency/broker system performs the costly task of screening applicants in order to allocate them to the appropriate risk class, provides information to potential customers about various coverages and costs, and shops the market for new companies to represent. The provincial systems clearly do not have the expenses of shopping the market or informing customers of competing companies' rates. But just as important, the provincial systems do not have as complex a risk rating scheme and the associated cost to screen clients is not incurred. The rudimentary risk rating of some of the provincial systems generates premiums which result in significant cross-subsidy of risky by less risky drivers.

The Manitoba and Saskatchewan systems have a simple and mechanistic method of charging insureds for different risks. The system may be cheap but it results in significant cross-subsidies. The B.C. system has a more complicated rating scheme and relies on some of the variables of a system used by private companies. Although still maintaining some cross-subsidies, they are not as severe as in the other public systems. However, with the more complicated rating system come higher transactions costs. This explains why the B.C. commissions and administration expense ratios are closer to the values found in the private system.

Therefore, the higher expense ratios for the private compared to the public system indicate neither inefficiency in the private system nor the presence of economies of scale. The higher private companies' expense ratios reflect the competitive response to refine the rate structure so as to price the risk of the insured correctly. This results in an efficient use of resources devoted to insurance. In effect, the public system obtains cost reductions by limiting choice, enforcing cross-subsidization and ignoring the deterrence effect of premium rates on accidents either through reducing the number of high risk drivers or altering their driving behaviour so as to obtain lower premiums.

2.4 Underwriting Performance

Having observed the claims and expense ratios, we now consider whether the provincial plans set the premiums such that there is an imputed return on the 'free' liabilities generated from writing policies and whether the underwriting profits after adjustment for investment income are zero. If the profits are consistently negative, there is a suggestion of subsidy by the province; if they are consistently positive, the insureds are overpaying for insurance. Neither of these situations could persist in a private system with competition and free entry.

To determine net underwriting profit, the free liabilities per dollar of premium earned generated by selling policies must be identified. The approach used is conceptually valid but the estimates of the necessary variables in the calculations would need more refinement if they were to be used in any regulatory function.

Some interesting results were found in this analysis. First, the public systems operate with very little in the way of reserves or equity. Since the province stands ready to make up any losses due to unforeseen circumstances, the equity cushion is not needed. The corollary of this observation is that most of the investment in insurance assets is financed with premiums and therefore the free liability ratio is high. For example, for ICBC the average value for the free liability ratio over the period 1982 to 1986 was 96.2, compared to a value of 72.5 for the Canadian companies proxy for automobile insurance for the period 1981 to 1985. Whether the absence of equity is a subsidy to public systems will be evaluated in a subsequent section.

Second, the assets allocated to the insurance function are a small proportion of total assets for a typical automobile insurance company; for example, in British Columbia the value has fallen steadily from 14% in 1982 to 7.1% in 1986; this compares to a value of about 22% for Canadian private companies.

Third, there is a disparity in the liabilities per dollar of premium earned. For all private insurance companies, the average value for 1981-85 was 1.084; for Canadian casualty insurance companies the value over the same period was 1.01. For Manitoba the average over 1982 to

1986 was .904 with the 1986 value of 1.14; the value for Saskatchewan was .883 over 1982-5. While the value of liability per premium dollar earned was broadly equal for Manitoba, Saskatchewan and Ontario, the value for B.C. is very high. Its low value in the sample period was 1.15 in 1982 and it rose to a value of 1.96 in 1986. The average value is 1.55. One explanation of this high ratio is slow payment procedures which generate a large amount of unpaid claims. Notice that with the large free liability per dollar of premium there is a substantial element of investment income to reduce premiums. Thus a comparison of premiums without taking this factor into consideration can give meaningless results.

Finally, the underwriting profitability was evaluated for the public systems. Remember that in the Ontario private sector analysis it was found that on average the industry had lost .6 cents per dollar of premium. The analysis shows that the Manitoba system lost 1 cent per dollar of premium over the period 1982 to 1986 and the B.C. system earned 1.7 cents per dollar over the same period. These observations suggest that the systems have set premiums to cover costs and the imputed return on insureds' investment. Therefore, no operating subsidy is observed in either system.

The Saskatchewan results show a profit over the period 1982 to 1985 of 12 cents per dollar; the profits ranged from 10 cents in 1982 to 22 cents in 1984. The 1985 value was a loss of 3 cents. The Saskatchewan system had a deficit and a loan from the province which it attempted to pay off by charging high rates. This is an approach that is not available to a competitive firm.

Therefore, both the Manitoba and British Columbia systems priced their policies accurately whereas Saskatchewan overpriced their policies to build up a reserve and make up for the lack of profits in the past. Therefore, the public systems did not appear to consistently underprice their automobile insurance.

3. Subsidies in Public Systems

A subsidy occurs when a cost that is incurred by the public insurance company is either not paid or not paid in full but is passed on to another party. In the public automobile insurance area, the third party would be the taxpayers of the province. If the public systems do have subsidized components within their operations then premium comparisons are not valid. For example, if certain expenses are not paid by public systems then the expense ratios are low and the premium is relatively low. To have valid comparisons between public and private systems would require an adjustment to the public sector premiums to reflect the subsidies. Unfortunately, the subsidies may exist but are not amenable to measurement and the necessary adjustments cannot be made.

In this section we investigate the suggested sources of subsidies and, where possible, evaluate their impact. The subsidies considered are the absence of a return on the equity investment that is included as a cushion, absence of an allowance for corporate income tax, and the use of services provided by the government below cost.

i) Equity Capital

It has been suggested that the absence of equity or reserves is a subsidy since the public sector plans must invest equity as a cushion and there should be a return on this equity either through dividends or by reinvestment of earnings. Therefore, it is argued that equity should be imputed in public systems and premiums should increase in order to provide a rate of return on this investment. In general, this argument does not appear to be valid. From the model it was observed that equity capital which was used as a cushion was independent of the underwriting side of the operation. The equity is invested in a securities portfolio and the returns are based on this investment portfolio. If the public system were forced to place equity in the operation, the premium rates would not be affected since the equity would be invested in a securities portfolio. The fact that the government does not invest in the company means that it is earning returns on other investments.

This argument would have to be modified somewhat if in the private companies, the equity was used to finance insurance assets as well as act as a cushion. In this case the portion of the equity invested in the insurance assets does not obtain a return from the investment portfolio. Thus, the return must be earned from the insurance operations and this will occur only if the premiums are increased. Therefore, a public system by not using equity would be subsidized to the extent of the return earned on the equity invested in the insurance operations. The analysis in the Booth study suggests that equity capital in the private companies is not used to finance insurance assets and hence it is unlikely that there is a subsidy. The approach in the Booth analysis used aggregate balance sheet data; a further analysis using individual firm data is necessary to refine the estimates.

There are, however, instances where a subsidy can be provided by the provincial government. For example, if the government continually must inject equity to cover losses of the provincial system, then premiums are too low and there is a subsidy. Also, if the government invests equity into the public system and it is regularly destroyed through losses due to underpricing of premiums, thereby forcing further injections of capital, there is a subsidy present.

ii) Corporate Income Tax

Private systems must pay a corporate income tax on income earned; premiums in the private system must cover this income tax expense. In the public system, there are no income taxes to be paid and hence premiums are lower. This represents a subsidy since the taxpayers of the province receive benefits from the federal government; these benefits are financed by the corporate income tax. If this tax is not collected then the taxpayers in the province will have to finance the services through higher provincial taxes. Therefore, ignoring the corporate tax element is a subsidy to public insurance companies and result in non-comparability of premiums.

iii) Input Prices

It has been suggested that some of the public plans do not pay competitive rates for services from the provincial civil service. It is also possible that these systems obtain the use of buildings at less than competitive rates. This clearly cannot be the case for private insurance companies.

If these suggestions are true, then there is an obvious subsidy equal to the difference between the competitive and actual rate charged. The cost of this subsidy is borne by the taxpayer who must pay for the unrecovered cost of the services provided.

4. Premium Comparisons: A Meaningless Exercise

It was noted previously that premium comparisons between cities under public and private systems can be at best illustrative and at worst meaningless. These comparisons are difficult for a number of reasons. First, the attributes of the insured must be held constant. These attributes include age, etc. and comparability of loss costs in the region. For example, loss costs in Vancouver are not the same as in Toronto! Second, there are subsidies to public systems which are not available to private companies. This will reduce premium levels for public systems. Third, even if the first two issues are not important, the presence of cross-subsidies in the public systems make comparisons of premiums meaningless.

For example, the premium comparisons used in the Toronto Star are evaluated in the Booth report. Using a 22 year old male with six years of claim-free driving, the average premium in Toronto is $1,327; the premium in Vancouver is $529. The difference in average rates of $793 reflects the cross-subsidy provided to risky drivers in B.C. In fact, looking at the 22 year old male with one accident, the average rate in Toronto is $3,376 and in B.C., the value is $413. The larger difference in premiums and the fact that the rate in Vancouver is lower for this class than for the less risky claim-free driver reflects the substantial cross-subsidization. Considering the lower risk categories, a 43 year old male with six years of claim-free driving has an average premium in Toronto that is $70 greater than the premium in Vancouver. However, if the individual shopped around in Toronto, a rate $31 cheaper than the rate in Vancouver could have been obtained. In addition, the rates quoted are not the result of negotiation but are standard rates. It is possible that the actual rate would be lower than the posted rate obtained in a telephone survey.

Since premiums cannot be compared, the reasonableness of the Toronto rates was evaluated by looking at the underlying claims costs. A premium was built up from the claims costs, expense ratios and investment income for the three classes of drivers considered in the premium comparison. The premiums are not directly comparable since they are built on $200,000 of third party liability and the Star quotations are for $1 million. The result is that the premiums generated by the analysis are within the range of quotes obtained from private insurance companies and are slightly higher than the average quotes for the classes. However, the premiums are reasonable and based on current costs associated with the coverages.

5. Cost Efficiency of Moving to a Public Plan

Everyone is interested in paying lower premiums for their automobile insurance policy. Will the introduction of a public-run automobile insurance company result in lower premiums for all insureds? If not, will the increase in rates for some insureds be more than offset by the reduction in rates for other insureds? In this section this question is investigated. There are a number of changes that could be introduced that would result in lower premiums. These include the introduction of no-fault insurance with its reduction in legal costs; limitations on awards will reduce expected claims costs; and restrictions on the right to drive for high risk groups. This latter change could be implemented by raising the driving age and introducing automatic suspensions of driving privileges for repeat offenders. These features would reduce expected claims costs. While all of these changes would reduce insurance premiums, they are beyond the mandate for this research.

The alternative that is investigated here is the change from a private to a public system. From the analyses in previous sections of this report, it is clear that there are no economies of scale and hence any savings must come from simplification of the rate structure and the enforcement of mandatory cross-subsidization. In the public system there would be a simple rating scheme which provides a crude sorting of drivers into different risk classes. This would reduce administrative costs and some portion of brokerage fees since there would be no costs involved in sorting insureds by risk. In addition, the commission costs would be reduced since there would be no brokerage network and hence no cost of dealing with new customers.

In order to estimate the premium costs for private and public automobile insurance, the Booth report begins by building a composite Ontario premium. Using thirteen rating categories, an estimated overall premium is calculated for each category. The Ontario premium is a weighted average of the premium for each class where the weights reflect the proportions insured in each category. In building the Ontario premiums the Canada-wide data on BIPD, collision, comprehensive and accident benefits were adjusted by the Ontario surcharge. The expense ratio used was 25% and the imputed investment income ratio, 12%. The weighted average premium for Ontario was $561.30. The premiums used in this calculation are not those that are actually charged but are based on the pure premium calculation.

If a public system were established and it is assumed that the loss and investment income ratios are the same as in a private system, the only benefit would arise through a reduced expense ratio reflecting the savings through minimal risk rating. Using a 19% expense ratio, in line with the B.C. experience, the Ontario premium is $526.09; this is a saving of $36.21 or 6.5%.

The savings are not large enough to have everyone benefit from a reduction in rates. By charging the same rate to all drivers, the lowest risk class which has approximately 43% of the driving population would have an increase in premiums of about $55 or 22.6%. For all other classes, premiums would fall. The second most populous class would have a 4% reduction in rates. This is so small that its value could be zero. The savings are greatest in the high risk categories which have a small number of drivers. For example, young drivers' rates fall by approximately $1400! Therefore, the result is a substantial cross-subsidy where increases in premiums for approximately 43% of the drivers subsidize substantial premium reductions for the 20% who are above average in risk.

This analysis suggests that any savings from moving to public ownership are small (approximately 6.5%). However, this analysis is incomplete and primarily suggestive. As the implications of moving to a public system are integrated into the analysis, the costs of moving to a public system would be higher.

First, the premiums in the analysis were built up from 1980 loss costs and may not reflect actual premium levels. Second, there is always a spread in premiums set by different companies for the same risk class and this variation in premiums could encompass the premium for the public system. This is a result of the competitive process. Without this push, there is no incentive to keep premiums low in the public company. Thus, a company in Ontario could easily have a premium below that of the public system.

Third, the cross-subsidy element will result in more young and risky insureds being on the roads. This will reduce the average quality of drivers on the road, thereby increasing the overall claims costs. This will increase the average premium under the public system alternative and will require even more severe cross-subsidization.

Fourth, it is assumed that the claims costs incurred for collision remain unchanged. Without the competitive pressure to minimize costs, there will not be an incentive to lower the costs of providing insurance service. This is a problem common to Crown Corporations and industries that operate subject to a regulatory constraint.

Fifth, as already noted in the previous sections, the comparisons are troublesome since the lower expenses of the public systems include unmeasured subsidies such as non-competitive costs for space and the absence of corporate taxes.

In conclusion, the movement to a public system is unlikely to result in any cost savings. Any savings which could occur through lower expenses of providing insurance arise only through a reduction in the use of rating classifications and the resulting introduction of inefficient cross-subsidization.

6. Comparisons with Woods Gordon Study

In 1978 Woods Gordon prepared a study for the Select Committee on Company Law. Report IX considered the issue of Government Ownership of Automobile Insurance. In this study a number of alleged advantages of government ownership are presented. It is our conclusion that the benefits of government ownership as proposed by the Woods Gordon Study are illusory and do not stand up to close scrutiny.

In Appendix C of the Booth Study, there is a review of the arguments presented in favour of government ownership and the response to these arguments that arises from the analysis in the current study.

Since the Woods Gordon Study was the only other major piece of research on the public versus private delivery of automobile insurance issue, the contents of Appendix C are reproduced here.

APPENDIX C: ARGUMENTS FOR AND AGAINST PUBLIC OWNERSHIP

FOR	AGAINST
Premiums	
Reduced premiums due to investment income and operating efficiencies (see below).	Lower premiums are an illusion clouded by hidden revenues (such as gas tax) and subsidies (see below). Investment income also directly lowers private insurance premiums and potential efficiencies are negated by unions and the waste inherent in the public sector.
Efficiency	
Improved efficiency in terms of the fraction of premiums returned as claims as a result of: - non-adversarial system saves on legal and negotiating costs - restructured claims and settlement procedures which streamline claims and simplify systems for paying repair shops - reduced delivery costs - economies of scale	The use of Intercompany Settlement Charts by private insurers already restricts the use of courts for collision cases to those in which doubt exists as to fault. Gradual decrease in efficiency due to union labor costs, poor incentive structure and the absence of a bottom line. Increased visibility and public scrutiny create the need for more documentation and internal checks and balances for decisions.
Fairness	
More equitable and fair compensation system	Oversimplification of rating system is unfair.

because it avoids unpredictable courts. Rates are set based on individual driving records so that unfair age and sex discrimination is avoided.	Unfair to safe drivers because poor drivers would be subsidized too much and incentives lessened. Tendency to oversimplify adjusting decisions by arbitrarily assessing equal fault in order to streamline operations.
Hidden Subsidies ICBC subsidizes other government departments through: - discounts to seniors and disabled - hospital plan contributions - free use of ICBC computers	Public plans are subsidized by: - paying no premium or corporate taxes - free access to police records - maintaining no loss reserves
Availability and Affordability No residual market	Residual market is adequately served by the Facility Association. Availability of other types of insurance may suffer if some private insurers leave.
Ability to provide affordable insurance to high-risk drivers through subsidization.	High-risk drivers are already subsidized. Further subsidies would lessen incentives and be unfair to safe drivers.

Investment Income

Investment income is utilized in Ontario, rather than being a drain on available capital.	Integrated world capital markets are readily accessible from Ontario so this factor would have no effect on either the availability or cost of capital. Also, 1982 figures show that ICBC has 82% of its funds in government of Canada bonds and bank deposits and only 18% in BC and municipal bonds.

Quality of Service

Public convenience due to: - one stop shopping and claims adjusting - less hassle in settling claims - direct dealings with insurance companies.	Poorer service because there is no threat of losing a customer and public employees lack motivation. Studies of public perception also support this view of public companies.

Profits

Profits are used to increase benefits, reduce premiums and absorb losses, rather than being distributed as dividends. Taxes not paid to Federal government.	Loss of corporate taxes must be made up by increasing other taxes. Note: Ontario could ask for profit remission for private companies similar to private provincial power companies.

Social Benefits	
Better organization of driver education and research programs due to centralized information and resources.	Existing education programs have been effective.
In-province head office prevents cash flows to out-of-province head office.	Most Canadian firms have head offices in Toronto and foreign firms also have large offices here.
Greater commitment and responsiveness to social needs.	Potential for use as a political vehicle, violating sound business and insurance practices. Need for mechanisms to control monopoly prices and practices.
Impact on Repair Industry and Costs	
Lower repair costs due to monopoly power over repair shops and more research into new repair methods.	Private insurers presently get discounts from shops for promising volume, a practice which would be inappropriate for a public company. May disrupt healthy competitiveness between repair shops by introducing significant economies of scale, to a unionized oligopoly.
Start-Up Difficulties	Logistical problems associated with starting such a large company from scratch.
Early difficulties are common to all businesses and are worth it for the long-term savings.	Confusion during changeover due to staggered policy renewals.

	Tendency towards higher claims frequency during early stages as people take advantage of what they see as a bottomless public purse.
Philosophical Issues	
Insurance premiums should be: - based on individual records - affordable for all - available for all - provide adequate compensation to all injured parties regardless of fault - not force drivers to contribute to private sector profits.	The free market is the cornerstone of a free society. In claims settlement public insurance companies represent the interests of society as a whole, rather than individual customers. Public ownership is not a solution to problems with the products. Public opinion currently favours less government involvement.

V. THE APPROPRIATE REGULATORY RESPONSE

1. Introduction

In previous sections it was noted that the form of the regulatory response by the provincial government should reflect the severity of the market failure. Since the analysis has been unable to identify any significant market failures, the obvious regulatory response is the minimum available; this would permit existing solvency requirements but no premium setting or review powers.

However, the provincial government has moved to freeze some insurance rates, roll back others and introduce a rate review process. In this section, the work of Professor Quirin, among others, will be reviewed to identify the regulatory responses available and to evaluate their impact on the competitive structure of the industry. Quirin, with others, concludes that since the automobile insurance industry is competitive, any regulatory procedures applied should not stand in the way of competitive pressures. Hence, regulation that regulates least, regulates best.

2. Regulatory Methods

The Quirin report presents an historical perspective to insurance regulation and then identifies a number of the areas in which controls are applied to the insurance industry. These controls or regulations range from minimum standards on entry, through reporting of financial and claims experience, and licensing and regulation of agents. The regulation that is of interest in this study is rate regulation. Most of the U.S. states have some form of rate regulation and in Canada, ignoring the provincially-owned systems, Nova Scotia, Alberta and Newfoundland also are engaged in rate regulation.

Quirin identifies three forms of insurance premium regulation. They are listed in decreasing order of control over premium setting:

i) Prior approval.
ii) File-and-use.
iii) Market competition.

i) Prior Approval

The prior approval model requires the insurance company (or a set of companies through a rating bureau) to file proposed rates to the regulatory body. The rates are quoted for standard policies and evidence on proposed loss experience, expenses and underwriting profits is presented to the regulator at a hearing; evidence of intervenors who oppose the proposed rates is also heard at the hearing. The output of the process is a set of rates that is acceptable to the regulator.

There are a number of problems with the prior approval format. First, the process can be very time-consuming. This delay can be very expensive for the applicant. Second, there are significant costs to this process. The obvious costs include significant expenses undertaken by the insurance companies to prepare evidence and be present at the hearing along with the required cadre of lawyers and experts. Similar expenditures are required for the regulatory body. There are indirect costs that are very substantial. A regulatory scheme which permits prices to be set on a cost plus basis generates a number of disincentives to efficient operations. Since costs will be covered there is no incentive to operate to minimize these costs or to introduce new technology. To the extent that a firm becomes more efficient, if its rates are reduced to reflect the added efficiency, then there is no incentive to reduce costs.

Second, there are a number of variables that are needed in the regulatory process that are either very hard to measure or are the result of an arbitrary allocation procedure. For example, expenses for automobile insurance are allocated in an arbitrary manner; there is no correct answer but without competitive pressures, companies will try to allocate a larger proportion of the expenses to the regulated operations thereby moving profits to the unregulated lines. Also, underwriting profits are difficult to measure. Most regulatory bodies use a rule of thumb approach which provides for underwriting profits yet in the model developed underwriting losses are expected. In fact, the companies rarely earn underwriting profits even though permitted. This is probably due to market forces that are not included in the regulatory process.

Finally, there is a strong disincentive to propose rates which are different than the standard rate. These 'deviated' rates are based on expense ratios which differ from the industry value, differential claims experience and non-standard policy coverages. Deviated rates are a method in which competition enters and the denial of these rates entrenches inefficient operations.

ii) File-and-Use

This approach is a more leisurely approach to regulation of rates; it does not introduce significant time delays and is consistent with competitive forces. The insurance companies file rates and evidence on losses, expenses and underwriting profits and can introduce the proposed rates either immediately or after a short waiting period. The regulatory body then evaluates the case for the new rates and their finding may be that the rate is excessive. This results in a reduction of the rate and/or rebates of the excessive amount. This is, however, a rare event since the firm and the regulator typically use the same fundamental model to develop rates.

One important feature of the file-and-use system is that it permits deviated rates; companies which introduce these deviated rates must be prepared to provide evidence to support them. The spread of file-and-use rates in the U.S. has been an important factor in the enhancement of competition in the industry. By the time that a file-and-use rate can be attacked by those who do not want a competitive rate, the rate will have been copied by so many competitors that a victory is irrelevant.

iii) Market Competition

Under market competition there is no formal approval of rates. The regulatory agency may monitor the rates to ensure that competition in the markets under its control is producing rates which approximate marginal cost. Although not necessary, rates, loss experience and finanical reports can be filed with the regulator.

The underlying premise is that competitive forces provide the best regulator of prices; intervention through rate reviews is justified only if there is a failure in some market such that competition will not work. The states who have used this approach include, California, Missouri, Idaho and Illinois. The latter state has now totally deregulated automobile insurance and does not intervene in any form.

3. Canadian Experience

Of the three provincial jurisdictions in Canada that regulate insurance premiums, we consider Alberta and Nova Scotia. We omit Ontario since it does not have the regulatory experience of the other two provinces. Each of the provincial agencies receive a large amount of statistical and financial data from the statistical agency of the industry and the rating bureau. They have used consultants periodically to assist in the interpretation of the data.

In Nova Scotia, regulation is performed by the Commission which has had experience in rate regulation of investor-owned utilities. The regulators, while having a good feel for the loss cost data within their jurisdiction, are unable to obtain reliable data on expenses at a provincial level. This is due not to the unwillingness of companies to provide the data, but the difficulty in identifying expenses of one small part of the overall Canada-wide, multiple-line operations. Therefore, the regulator ensures that rates proposed for Nova Scotia reflect loss experience in the province.

Alberta set up its insurance rate regulation board in 1976. While less formal than that found in Nova Scotia, the criteria applied and the results obtained are generally the same. Moreover, both provinces do not appear to have strong controls on profitability or premium levels. Although these jurisdictions require prior approval, the hearing procedures are not time consuming and certainly do not constrain insurance companies' activities in a meaningful way.

4. The Regulatory Model: Public Utility

In the prior approval approach, and to a lesser extent in the file-and-use approach, some mechanism must be used to identify whether automobile insurance rates are acceptable or not. When formulated in this way, the comparison to the public utility model of regulation is obvious and many of the regulatory schemes for automobile insurance do utilize a very similar approach. However, it is our contention that the public utility model is not suitable and its use where it is not appropriate will generate a number of serious problems.

The public utility model is a method of identifying an acceptable set of rates for the products and/or services of the utility that cover the costs of the company including taxes and interest on debt used to finance a portion of the assets and permit the utility to earn a rate of return on the portion of the assets financed by equity. The return on equity is not guaranteed and its actual value will fluctuate as actual revenues and costs deviate from their expected values. This regulatory model is in essence 'cost plus' regulation.

Once the permitted overall revenue for the firm is determined, the individual prices are determined subject to the revenue constraint. Problems abound in this model; these include the allocation of joint costs, dealing with non-regulated products and estimation of the return on equity. However, the underlying rationale for the regulation is that the utility is a monopoly and the competitive process will not provide restrictions on earning excessive profits. The companies regulated under this procedure include pipelines, gas distribution, telecommunications and electric utilities.

Applying this model to the underwriting activities of Ontario automobile insurance companies would require individual rates to cover the expected values of expenses, claims or loss costs and an allowance for underwriting profits.

The ease with which the regulatory model can be formulated for automobile insurance masks the serious conceptual and implementation problems. Some of these have been noted in a previous discussion on this section.

The problems include the following:

i) Allocation of costs among regulated and non-regulated lines of insurance is difficult. The firm will attempt to increase expenses in the regulated lines thereby shifting profits to the unregulated lines.

ii) Companies operating across Canada will have to allocate, arbitrarily, their costs to the Ontario operations.

iii) The estimation of a profit for underwriting activities is difficult and conceptually should be a loss! The assets used for the insurance activities are funded by prepayments of premiums. If the assets could be allocated to automobile insurance, since they are not funded by equityholders, no return to equity should be provided. Further, the prepayments generate an investment fund, the earnings on which reduce the premium levels. Thus, the underwriting profits are expected to be negative, not positive. The degree to which they are negative depends upon the investible funds per dollar of premiums written. This will differ for each insurance company. Using average values will result in non-differentiated rates.

iv) The automobile insurance industry is competitive and regulation is not necessary to correct for market failure. Introducing regulation where it does not belong will do one of two things; either it will force firms to leave the industry if the regulation is effective or the regulatory process may be captured by the company and rates will be higher not lower. Therefore, the problems of applying an inappropriate model will generate a regulatory regime for automobile insurance that does not promote efficiency or innovation.

5. Conclusions

In the U.S., the studies of insurance regulation are strong in their condemnation of prior approval regulation. For example, Jaskow (1973) concludes:

> (1) "Prior approval rate regulation should be eliminated and replaced with a no-filing system allowing insurance rates to be determined competitively ...

> (8) "Attempts by some states to go toward more price regulation rather than less should be vigorously discouraged ...
>
> "There are very few examples of deregulation in the history of regulation in the United States Here is an example, however, of a situation in which regulation has worked to the benefit of almost no one (except perhaps the direct writers) in the last fifteen years ... Those states which have eliminated formal rate regulation should be congratulated and other states encouraged to follow their examples."

In a study in 1977, Paul MacAvoy concluded:

> "The evidence strongly suggests that unrestricted price competition is superior to rigid rate regulation as a way of achieving reasonable prices, a reliable insurance mechanism and economically fair prices which are based on an accurate assessment of the risk presented."

Other studies also found that premium rates and/or profits were higher in states with regulation. A more recent study by the U.S. General Accounting Office concludes just the opposite. However, Quirin identifies a number of serious problems with this study. One major problem is that there are more individuals insured under assigned risk plans in regulated than in non-regulated jurisdictions. Since the system as a whole loses money on assigned risk insureds, the 'cheaper' insurance on regulated jurisdictions reflects the fact that larger subsidies produce lower prices. After considering the problems with the study, Quirin concludes "the study's evidence does not support the conclusion it has drawn from them. The preponderance of empirical evidence from the U.S. supports the view that regulation increases costs to consumers; the results of those few studies with contrary findings are easily explicable in terms of defects in statistical methodology". (p. 31)

Quirin, in his study, concludes that there is no reason to believe that the experience of regulation in Ontario will be any different. The experiences of Nova Scotia and Alberta are not very illuminating since the regulation does not introduce binding controls on the behaviour of the industry. If regulation is to be imposed in Ontario it should "be of the open competition variety in effect in California. As a next best, a file-and-use model could be imposed. No economic case can be made for more stringent regulation." (Quirin) In fact, Quirin suggests that binding regulation may result in the withdrawal of existing insurance company capacity.

ENDNOTES

1. The profit relationship is written as follows:

$$\text{Profit} = (P^* + E)(r_p) + P(1 - L - v) - F$$

where

Profit = expected profit to equityholders
P^* = premium dollars generated for investment
E = equity dollars invested in investment portfolio
r = expected rate of return on investment portfolio
L = expected loss ratio = expected claims/ premiums
v = expected expense ratio = expected expenses/ premiums
F = fixed costs
P = actual premiums collected

2. In equilibrium, it is expected that

$$1 - L - v = -rS$$

where $S = P^*/P$ and can be greater than unity, and r is the risk-free interest rate. This relationship reflects the expected result but since L, v and even r can be random variables, it is likely that this relationship will not hold using actual results for a particular year.

A COMPARISON OF THE CAR INSURANCE INDUSTRY IN ONTARIO WITH THE PUBLIC MONOPOLIES IN BRITISH COLUMBIA, MANITOBA AND SASKATCHEWAN

Prepared for the Inquiry Into Motor Vehicle Accident
Compensation in Ontario

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I. BACKGROUND

Before examining the fairness of insurance rates or prices and the various systems that exist in Canada, it is important to understand the nature of the product, that is, the types and extent of coverage that automobile insurance policies provide under each of these systems. Across Canada, the standard automobile insurance policy is composed of three sections: third party liability (also known as bodily injury and property damage), accident benefits, and collision.

Third party liability coverage protects the insured against liability imposed by law for loss or damages resulting from the ownership, use or operation of the automobile, and resulting from bodily injury to or the death of any person, or damage to property. This coverage applies to both the insured and anyone who uses the vehicle with the insured's consent. This coverage is compulsory in all provinces and has been so in Ontario since 1980. While Ontario has had some difficulty in enforcing this law (estimates have put the percentage of uninsured motorists as high as 15%), public insurers have been successful in tying insurance to vehicle registration so that a motorist must be insured in order to register his/her vehicle. As a result of this and the lower rates charged high risk drivers, it appears that uninsured drivers are not a big problem in the provinces with public insurance. The minimum level of coverage in all provinces is $200,000, but excess coverage can be purchased if desired.

Claims on third party coverage partly result from court awards, so that legal trends, in addition to inflationary cycles, dictate changes in average claim costs. Skyrocketing court awards in recent years have caused third party claims costs to increase by 64% (1986 Green Book) since 1982 in the private sector, providing much of the impetus for increasing insurance premiums.

The second section of an insurance policy provides accident benefits coverage, including medical payments, funeral expenses, disability income benefits and death benefits, regardless of fault. Medical payments coverage is meant to cover the doctor, hospital and rehabilitation costs; funeral expenses and death benefits are meant to compensate the insured's family should death result from an accident; and disability income benefits compensate for temporary or permanent losses of income as the result of an accident. In most provinces, the medical benefits are integrated with the provincial health system and direct payments are made to the province in lieu of case by case reimbursement.

Accident benefits coverage is compulsory across Canada, although the extent of coverage varies from province to province. Ontario's coverage compares favourably with other provinces, providing similar medical, funeral and disability benefits and death benefits which are superior to those in B.C. and Saskatchewan. In comparison with third party coverage, accident benefits up to the scheduled limits are not subject to the tort system, and partly as a result, the average claims cost of accident benefits policies has increased only 37% since 1982. In Ontario, claims above the scheduled limits can be made through the tort system. Table 1 gives details of the compulsory coverage for Ontario and the three public plans.

The third section of the Standard Automobile Policy is optional and deals with collision coverage. Coverage can include a wide range of specified perils depending on which of four levels of coverage is chosen. All perils coverage indemnifies the insured against direct and accidental loss of or damage to the automobile, including its equipment, from all perils, as specified; Collision or Upset coverage protects the insured against only loss or damage caused by collision with another object or by upset; Comprehensive coverage provides compensation for damages other than by collision or by upset; and Specified Perils coverage is limited to damage caused by fire, lightning, theft or attempt thereat, windstorm, earthquake, hail, explosion, riot, falling or forced landing of aircraft or of parts thereof, rising water, or the stranding, sinking, burning, derailment or collision of any conveyance in or upon which the automobile is being transported. These coverages almost always include a deductible portion which forces the insured to pay a specified initial amount of any claim. This 'co-insurance' ensures that the risk of having an accident does not appreciably change after insurance is taken out.

The costs of collision claims are affected mainly by inflation in automobile repair and replacement costs. Since 1982 the average cost of such claims has risen by only 25%. Note that 'fault' is defined in many accidents on a formula basis i.e., one car rear-ending another is always at fault. As a result, in most car accidents there is no resort to the tort system to settle collision claims. This innovation by private insurance companies was designed to minimize the legal cost component of claims costs.

TABLE 1

Automobile Insurance Coverage

THIRD-PARTY LIABILITY	SASKATCHEWAN COMPULSORY	MANITOBA COMPULSORY	B.C. COMPULSORY	ONTARIO COMPULSORY
MAXIMUM BENEFITS	$200,000	$200,000	$200,000	$200,000
ACCIDENT BENEFITS	COMPULSORY	COMPULSORY	COMPULSORY	COMPULSORY
DEATH BENEFITS				
-Time Limit	2 Years	None	None	2 Years
-Primary Dep.	$10,000	$10,000	$5,000+$130/wk*	$10,000
-Secondary Deps.	1,500	2,000	1,000+$30/wk*	1,000
-Spouse	2,500	10,000	2,500	10,000
-Dependent Child	2,500	2,000	1,500 Max	2,000
			*for 104 weeks	
MEDICAL EXPENSES	$10,000 Max	$20,000 Max	$100,000 Max	$25,000 Max
FUNERAL EXPENSES	None	1,500 Max	1,000 Max	1,000 Max
DISMEMBERMENT	$10,000 Max	$20,000 Max	Not Covered	Not Covered
LOSS OF INCOME				
-Full-Time Empl.	$150/wk Max	$150/wk or 70% of Gross Wages Max.	75% of Gross Wages	80% of Gross Wages
-Homemaker	$150/wk	$150/wk	$145/wk	$70/wk #
-Partial Disability	$75 /wk	$60/wk	None	None
- # of Weeks	104	104	104	104
				# for 12 wks
COLLISION	COMPULSORY ALL PERILS	COMPULSORY ALL PERILS	OPTIONAL	OPTIONAL
DEDUCTIBLE (BASIC)	$500	$200	Varies	Varies

II. A MODEL OF A CASUALTY INSURANCE COMPANY

There are two key features that differentiate the products of a casualty insurance company from other consumer products: time and uncertainty. The time dimension is the fact that for a premium today, an insurance company agrees to reimburse its policyholder at some point in the future. For car insurance companies this time in the 'future' is relatively short, since the accident must occur during the current policy year; payment may then be pushed further into the future as a result of delay by the policyholder in reporting the claim, time for litigation and the company in settling it. The uncertainty stems from the fact that the individual policyholder does not know whether or not he/she will have an accident and thus require reimbursement.

From the company's point of view these two key features of insurance in turn introduce two key operating characteristics: first, the firm will earn a return by investing the premium paid by the policyholder and second, the firm will have to write a large number of policies to diversify the risk of any individual policy. In many branches of insurance, e.g., life insurance, the risk can be largely removed by pooling it with other risks, so that an actuary can work out fairly accurately how much will have to be paid out on each policy and how variable will be the total payout by the firm. With car insurance, given the common nature of claims costs, pooling cannot eliminate all risk. However, given the variability that remains, the firm can determine how much equity capital is required as a cushion to ensure that a bad year of losses does not force the firm into bankruptcy.

Given these two key characteristics of insurance we can create a simple single period model of an insurance company, whereby a firm raises equity capital and writes insurance policies against that capital. If the policies all mature in one year's time, the firm will invest both the premium income and its capital in the interim, then at the end of the year it will liquidate its investment portfolio and pay out on its claims, distributing the residual as a dividend to its common stockholders, or to its policyholders if it is a mutual company, or retaining it in order to write more policies. If the claims exceed the investment income and the original policy income, then the return on equity will be negative and vice versa.

Given this underlying model we can represent the profitability (Π) of a casualty insurance company as

$$\tilde{\Pi} = \tilde{r}_s S + \tilde{r}_B B + P(1-\tilde{L}) - vP - F \qquad (1)$$

where r_s and r_B are the returns on the stock (S) and bond (B) investments respectively, which for simplicity we assume are the only eligible investments, P is the amount of premium income generated, L the loss ratio and v and F the variable and fixed costs respectively. For the casualty insurer, r_s, r_B and L are uncertain, which is represented by the tildes (~).

The key requirement now is to value the uncertain profit stream. To do this we use the Capital Asset Pricing Model (CAPM) developed by William Sharpe (1964) and John Lintner (1965) and previously used to evaluate insurance companies by Hill (1979) and Fairly (1979). The CAPM has become the most widely used model for valuing uncertainty since it specifically uses the benefits of diversification. Since some of the fluctuation or uncertainty in any security's return is unique to that security, risk can be reduced by holding a portfolio of securities. This obvious extension of the basic advice of 'not putting all your eggs into one basket' has some profound implications for valuing securities. Since individuals will diversify, either directly or indirectly through mutual funds and financial institutions, the risk of any security should be measured by its contribution to the risk of a diversified portfolio. This is what is termed systematic or market risk.

In theory, individuals will continue to reap the diversification gains until they hold all the risky securities that exist, a portfolio that is termed the market portfolio. In practice, such extremes in diversification are rarely found, but the high correlation between the rates of return on diversified portfolios allows us to use the market portfolio as a benchmark. This then allows us to look at risk measure related to the underlying variables, which are not unique to individual investors.

The CAPM values the uncertain profit stream to the equity holder as

$$V = \frac{E+\Pi-\lambda \mathrm{cov}(\Pi,\ Rm)}{1+r} \qquad (2)$$

where V is the value of the firm, E is the original equity contribution, Π is the expected profit or cash flow stream, r is the risk-free interest rate, cov(Π, RM) is the covariance between the uncertain profits and the return on the market portfolio and λ is the market price of risk. The objective of the firm is to make decisions today to maximize the net present value of the equity, i.e., the difference between the market value of the equity and the original amount of equity investment. Substituting (1) into (2) gives

$$\max Z = \frac{r_s S+r_B+B+P(1-L)-vP-F^{-}\lambda \mathrm{cov}(r_S S+r_B B+P(1-L),R_m)-rE}{1+r} \qquad (3)$$

Moreover, there is the basic balance sheet constraint,

$$B + S = P + E \qquad (4)$$

that is, the investment in securities comes from the policyholders via premiums and equity holders via their original investment. Hence, using (4) in (3) we have

$$\max Z = \frac{(r_s-r)S+(r_B-r)B+P(1-L)-vP-F+rP-\lambda \mathrm{Cov}(r_S S+r_B B+P(1-L),R_m)}{1+r} \qquad (5)$$

which is our basic valuation equation.

The model represented by equation (5) is very simple; however, it captures the basic notion of a casualty insurer. In practice, of course, firms do not operate within a single period framework; policies are written continuously and claims are settled continuously. However, within any fixed period the flow equation representing profits is approximately correct, except for the fact that the true loss ratio can only be approximated. Similarly, in equation (4) not all of the premium revenues are invested in securities. In practice, premiums generate funds for investment in two ways. First, some policies will overlap the fiscal year, hence some of the premium revenues are unearned and thus represent a liability to policyholders. Similarly, some of the claims cannot be settled during the year and thus a reserve for unsettled claims has to be established. In both cases, for an ongoing firm, permanent capital is effectively provided by the policyholders. To recognize this fact we simply rewrite the balance sheet constraint of equation (4) to get

$$B + S = \gamma P + E \tag{6}$$

where γ is the proportion of policy premiums that accrues as capital for the firm to invest.

Our unregulated casualty insurer is thus faced with the following net present value maximization problem

$$\max_{S,B,P} Z = \frac{(r_S-r)S+(r_B-r)B+P(1-L)-vP-F+r\gamma P-\lambda\mathrm{cov}(r_S S+r_B B+P(1-L),R_m)}{1+r} \tag{7}$$

where the two crucial management decisions are (1) the volume of insurance policies to underwrite represented by P and (2) the level of investment risk to undertake represented by S and B. This former decision can be termed the 'insurance exposure' decision and the latter decision the 'investment exposure' decision.

The optimality conditions are:

$$S: \quad r_S-r-\lambda\mathrm{cov}(r_S, R_m) = 0 \tag{8}$$

$$B: \quad r_B-r-\lambda\mathrm{cov}(r_B, R_m) = 0 \tag{9}$$

$$P: \quad 1-L-v+r\gamma-\mathrm{cov}(1-L, R_m) = 0 \tag{10}$$

Equations (8) and (9) are just the rate of return formats of the CAPM. The interpretation is straightforward. If the casualty insurer feels that the expected rate of return on either bonds or equity (r_B, r_S), exceeds their risk adjusted costs ($r+\lambda\mathrm{cov}(r, R_m)$), then more of that investment should be purchased. This is simply the standard investment decision rule whereby the investment manager invests funds into those investments that are anticipated to 'beat the market'.

The insurance decision of equation (10) is also straightforward. The loss ratio for casualty policies is essentially unrelated to the return on the market portfolio, since whether or not it is a good or bad claims year is essentially unrelated to whether capital markets are depressed or buoyant. Hence, $\mathrm{cov}(1-L, R_m)=0$. In this case, we have the basic criteria

$$1-L-v = -r\gamma \qquad (11)$$

which indicates that insurance premiums will be written until the expected marginal underwriting return, (one minus the expected loss ratio minus the variable costs) is negative.

The reason why the underwriting return is negative is that each policy written contributes to the capital of the firm through loss reserves and unearned premium income. The amount of free capital so contributed depends on the parameter, γ, the higher this parameter is, the more free capital is generated. Hence, since this capital is invested at least at the risk-free rate of return (r), the casualty insurer will keep writing policies until the loss on underwriting is just offset by the investment income so generated.

It is thus a cardinal rule in evaluating the performance of casualty insurers that we would expect to find underwriting losses. This does not mean to say that we will actually find them, since in any one particular year the actual loss ratio may be higher or lower than expected. Thus it is possible that in a good year underwriting income may even be positive. It is also true that as capital market conditions change, so too will the insurance market. From equation (11) it is apparent that as market interest rates rise, so too will the underwriting losses, since insurers will be scrambling to book more policies and thus have more money to invest in securities.

The foregoing model is appropriate for an unregulated public insurance company, because no constraints or corporate taxes have been imposed on it. As a result, insurance exposure and investment exposure are separate problems. Such a model might be appropriate for public insurance companies that do not fall under the jurisdiction of the Federal Superintendent of Insurance. However, for private casualty insurance companies, in addition to corporate taxes, there are a host of constraints on their operations that cause this separation of management decisions to break down.

The principal restriction that we will examine is the capital restriction that determines the multiple of premium income that can be earned for each dollar of equity capital. Although this multiple varies by province and size of insurer, we will denote it by a constant α. For most firms this restriction is binding, that is, a competitive firm would desire to write more policies per dollar of equity capital. It is because a competitive firm would operate with less capital, and thus a higher risk of bankruptcy and insolvency, that the Superintendent of Insurance imposes a capital restriction.

For our purposes it means that premium income is a function of the equity capital of the insurance company, i.e., $P=\alpha E$, where in most jurisdictions $\alpha = 3$. Hence, since the constraint is binding, the amount of equity determines the value of premium revenues that can be earned and the value of the investment in securities, since the investment by policyholders (γP) also becomes a function of the size of the equity. Hence, the balance sheet constraint becomes

$$B + S = \gamma\alpha E + E = E(1+\gamma\alpha) \tag{12}$$

The total investment decision is now fixed by the equity and underwriting decision; all that remains is the composition of the investment portfolio.

The introduction of corporate taxes and regulation thus changes the model of equation (7) to

$$\max_{E,\delta} Z = \frac{(1-t)[(1+\alpha\gamma Er_p+\alpha E(1-L-v)-F-\lambda \mathrm{Cov}((1+\gamma\alpha)r_p+ \alpha E(1-L),Rm)-rE}{1+r} \tag{13}$$

where $r_p = \delta r_s+(1-\delta)r_B$.

The key values are the composition of the investment portfolio, determined by the proportion invested in equities (δ) and the proportion in bonds ($1-\delta$), and the scale of the firm, determined by the size of the equity (E). The level of premium income (αE), the capital contributed by policyholders ($\gamma P=\gamma\alpha E$), and the size of the investment portfolio ($(1+\gamma\alpha)E$) are all then fixed by the parameters and the size of the equity.

The optimality conditions are then

δ: $r_s-\lambda cov(r_s,R_m)-r_B+\lambda cov(r_B, R_m)=0$ (14)

E: $(1-t)[(r_p-\lambda cov(r_p, R_m)(1+\gamma\alpha)+\alpha(1-L-v)]-r=0$ (15)

where r_p in equation (15) is the optimal portfolio return found from equation (14). As before, the investment decision depends on the expected return on the bond and equity investments, relative to their risk-adjusted rates of return. Unlike equations (8) and (9), however, equation (14) just determines the mix of the optimal portfolio and not its size. If the risk-adjusted equity return ($r_s-\lambda cov(r_s, R_m)$) exceeds the risk-adjusted bond return ($r_B-\lambda cov(r_B, R_m)$), then the proportion invested in the stock market (δ) goes up. However, without any special investment timing skills, equation (14) will be zero, indicating no special investment mix.

Our concern is with the size of the insurer because of its relationship to the pure insurance results. If we rearrange equation (15) by noting that $r=r(1+\gamma\alpha)-r\gamma\alpha$, then we can get

$(1-t)(1-L-v)=-r\gamma-((1+\gamma\alpha)/(\alpha)((r_p-\lambda cov(r_p.Rm)(1-t)-r)$ (16)

which should be compared to equation (11). Note that it is a condition of capital market equilibrium that $r_p-\lambda cov(r_p,Rm)=r$, that all risk adjusted expected rates of return should be equal. If we use this condition we can simplify equation (16) to get

$$1-L-v = (-r\gamma+((1+\gamma\alpha)/\alpha)rt)/(1-t) \quad (17)$$

which indicates that the capital constraint interacts in an interesting way with the imposition of corporate income taxes.

In the unregulated public insurance company problem the investment and insurance exposure problems were separate. This is not the case for the private insurer because the regulator insists on a substantial cushion of bond and equity investments to ensure that the company survives to pay off on its liabilities (claims). However, the income from this investment portfolio is taxed along with any underwriting profits. From the investor's point of view an investment in bonds and equities can be made without the extra layer of taxation imposed at the corporate level, either by investing directly or by investing through a mutual fund. Hence, the underwriting operation has to be more profitable to compensate the insurance company investor for this extra layer of taxation.

If in equation (17) we set t=0, we get the same result as in equation (11). However, as t increases, the private insurer has to have a lower and lower loss ratio (L) to compensate for the extra taxes paid on the company's investment operations. This can be seen by further rearranging equation (17) to get

$$L = 1-v+[r\gamma-((1+\gamma\alpha)/\alpha)rt]/(1-t) \qquad (18)$$

as a market equilibrium condition i.e., an equilibrium loss cost such that the private insurer will have no incentive to change the scale of the company's insurance operations. In Table 2 we show how the loss cost ratio declines as the corporate tax rate increases, given reasonable numbers for the other variables.

If we reject market equilibrium and allow the investment manager to believe that he can beat the market, then the risk-adjusted expected rate of return ($r_B-\lambda\text{cov}(r_B, RM)$) exceeds the risk-free rate in equation (16) and the investment manager believes that his market portfolio is undervalued. In this case the casualty insurer will write more policies in order to generate the premium income to invest in the 'undervalued' securities. As a result, the loss ratio will increase. This situation is illustrated in column B of Table 2, where with some hypothetical numbers the loss ratio increases by some 3%, when the investment manager believes the market is undervalued on an expected return basis by 2%. Note that unlike the unregulated insurer, the investment decision is inextricably linked with the insurance decision, since the equity constraint forces the insurer to have excess equity capital.

The true implication of this Table 2 is that when the capital market is buoyant and investment managers feel that the market is undervalued, then we should expect that private regulated casualty insurers have even bigger underwriting losses than the unregulated public insurers, i.e., the provincial insurers, since these companies have no incentives to use premium income as a source of funds to enhance the value of private equity. When this buoyant market coincides with high nominal interest rates, we would expect very large underwriting losses, as the effects compound each other.

TABLE 2

Equilibrium Loss Costs and The Corporate Income Tax

Corporate Tax Rate	A Loss Cost	B Loss Cost
0	0.859	0.887
0.05	0.857	0.886
0.1	0.855	0.884
0.15	0.853	0.881
0.2	0.850	0.879
0.25	0.847	0.876
0.3	0.845	0.873
0.35	0.840	0.870
0.4	0.836	0.865
0.45	0.831	0.860
0.5	0.825	0.854

$$L = 1 - v + [r\gamma-((1+\gamma\alpha)/\alpha)rt]/(1-t)$$

where v = expense ratio of 0.25
r = interest rate of 0.1
γ = net free liabilities of 1.09
α = premium to equity ratio of 3

risk adjusted return is 12% for B instead of 10%.

This simple model is thus rich enough to capture some of the key features of casualty insurance companies in Canada. Also, from examining equation (16), it is apparent that for the competitive insurance company, the loss ratio, the marginal production cost and the share of premiums available for investment (γ) are largely beyond the control of the firm. Hence, in the long run, when the firm also has to cover its fixed costs we need to examine the following crucial operating characteristics:

(1) The loss ratio L, which is termed the claims ratio in the Insurance Bureau of Canada's Green Book. This ratio includes not only the payout to policyholders on their claims, but also the adjustment costs required to satisfy the claim.

(2) The expense ratio $(vP+F)/P$, which is the variable costs (commissions, premium taxes, etc.) as well as the corporate overhead as a percentage of net premiums earned.

(3) The proportion of funds per dollar of premium income which is available to the insurance company for investment purposes (γ).

(4) The risk-free return that the insurance company can expect to earn on the funds available from policyholders.

These four key operating characteristics determine the behaviour of casualty insurance companies. In addition, we will also examine what is called the pure premium which is just the claims and adjusting costs for various categories of car insurance, for example, the overall pure premium is just LP, the average amount spent on settling all claims.

One final note before examining actual performance is that the investment income attributable to underwriting is only the risk-free return on the capital provided by policyholders. If the company decides to invest in risky securities, such as equities and corporate bonds or in real estate, the surplus or shortfall in investment income flows through to the common stockholders. That is, if investment income falls, this drop in income reduces the stockholder's income and should be separated from the underwriting results, and conversely if investment income increases. In this sense, the capital provided by policyholders is effectively an interest-free loan; competition amongst insurers ensures that it earns the risk-free rate. Investment income only affects the underwriting results because of the 'free funds' made available to the insurance company due to the unearned premiums and premium reserves that automatically arise as a result of doing business.

In this model no 'equity' is allocated to the underwriting operations since although, periodically, infusions will be made to support 'bad' underwriting results and dividends will be taken out with good operating results, overall underwriting results are unsystematic and no cost is attached to the cost of providing a 'cushion' for this uncertainty. This result holds whether the insurer is a public insurance company, where the cushion is provided by the province's exchequer, or a private insurance company, where the cushion comes from the firm's portfolio of investments. The only extra 'cost' that needs to be allocated to the private firm's underwriting operations comes from the tax effect discussed earlier. The parallel of our model to the normal financial leverage model is discussed in the appendix.

APPENDIX

In our model, profits are

$$\Pi = r_S S + r_B B + P(1-L-v) - F \qquad A(1)$$

however, we can define the portfolio rate of return as $r_p = \delta r_S + (1-\delta) r_B$ where δ is the portfolio weight for the equity market and all funds are invested. Inserting this specification, and noting the balance sheet constraint $B+S=\gamma P+E$ into A(1) gives

$$\Pi = r_p(\gamma P+E) + P(1-L-v) - F \qquad A(2)$$

In the long run, both variable and fixed costs are variable and equal to the expense ratio $v+F/P$. In this case, we can use the long run equilibrium version of equation (11), i.e.

$$1-L-(v+F/P) = -r\gamma \qquad A(3)$$

to substitute into A(2). If we then divide through by the equity amount (E) and define in the normal way the return on equity as Π/E, we get

$$ROE = r_p + (r_p - r)\gamma P/E \qquad A(4)$$

which is the normal financial leverage equation found in any introductory finance textbook, once we realize that γP is debt. The insight of our model is that the cost of debt (γP) is met by reducing premium rates and implicitly paying the interest rate r, rather than the direct payment as with normal debt.

III. PERFORMANCE EVALUATION OF CASUALTY INSURERS IN ONTARIO

A. Claims Ratios

Table 3 gives the recent performance of various claims ratios for automobile insurers in Ontario over the three main product lines based on direct premiums written. If the good news is given first, it is that the claims ratios for personal accident benefits and other coverage (collision, all perils, comprehensive, etc.) have been relatively stable. The 'other' claims ratio in 1985 was 72.3%, insignificantly different from its six year average of 73.7%. Similarly, the claims ratio for personal accident coverage of 89.9%, although significantly higher than its six year average of 80.5%, was down from the 96.9% level of 1984. For both these types of coverage it appears that premiums are at least covering the payout to policyholders and marginal adjustment costs.

Figures 1A and 1B graph the claims ratios for personal accident insurance and collision for Ontario and the rest of Canada respectively, where the rest of Canada also excludes B.C., Manitoba and Saskatchewan. The striking result here is that the claims ratio for personal accident insurance in Ontario is much higher than in the rest of Canada. However, given the substantial regional variation in personal accident coverage, not too much importance can be attached to this observation. In contrast, the claims ratio for 'other' seems to be essentially the same in Ontario as in the rest of Canada. In summary, personal accident and 'other' coverage seem to be under control, in the sense that the claims ratios do not seem to exhibit any trend, and the performance in Ontario largely mirrors that in the rest of Canada.

The bad news is that the claims ratio for third party liability for bodily injury and property damage has increased in Ontario for each year since 1980. Moreover, for the last three years the claims ratio has exceeded 100%, which means that the payout to claimants plus adjusting expenses has exceeded the value of the premium income. Since the claims ratio does not include any allocation of general expenses, it is quite obvious that the premiums charged for bodily injury and property damage have been lower, relative to the costs incurred in meeting claims. Figure 2A shows that for third party liability,

TABLE 3

Automobile Loss Ratios in Ontario

	1985	1984	1983	1982	1981
A) TOTAL					
Direct Premiums Written	2050.7	1984.1	1905.7	1769.0	1502.0
Direct Losses & Adjustment	2055.9	1888.3	1599.2	1424.4	1270.0
Loss Ratio	100.3	95.2	83.9	80.5	84.5
B) THIRD PARTY LIABILITY					
Direct Premiums Written	1078.1	1024.1	984.9	903.7	787.5
Direct Losses & Adjustment	1329.3	1204.5	993.4	819.5	695.9
Loss Ratio	123.3	117.5	100.9	90.6	88.3
C) PERSONAL ACCIDENT					
Direct Premiums Written	131.8	131.4	120.0	117.2	108.7
Direct Losses & Adjustment	118.5	127.4	101.4	86.3	77.3
Loss Ratio	89.9	96.9	84.5	73.6	71.0
D) OTHER (collison, etc.)					
Direct Premiums Written	840.7	828.6	800.7	748.7	605.8
Direct Losses & Adjustment	608.1	556.4	504.4	518.6	496.9
Loss Ratio	72.3	67.1	63.0	69.3	82.0

Source: Federal and Ontario Reports of the Superintendents of Insurance.

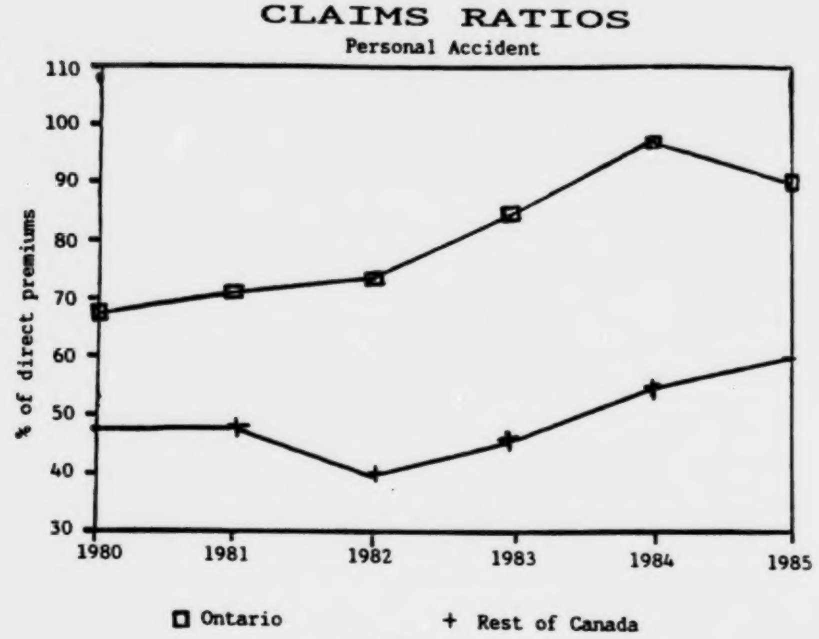


FIGURE 1A

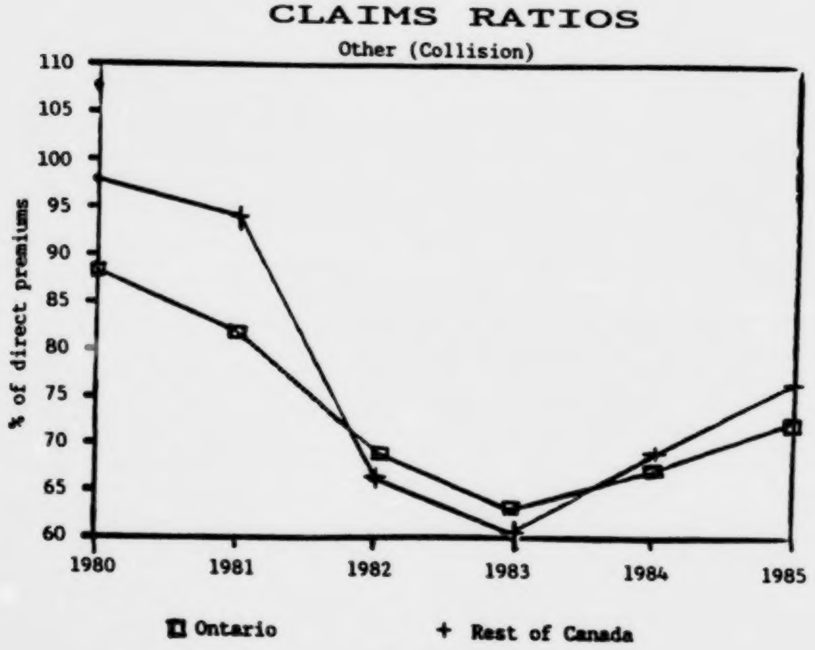


FIGURE 1B

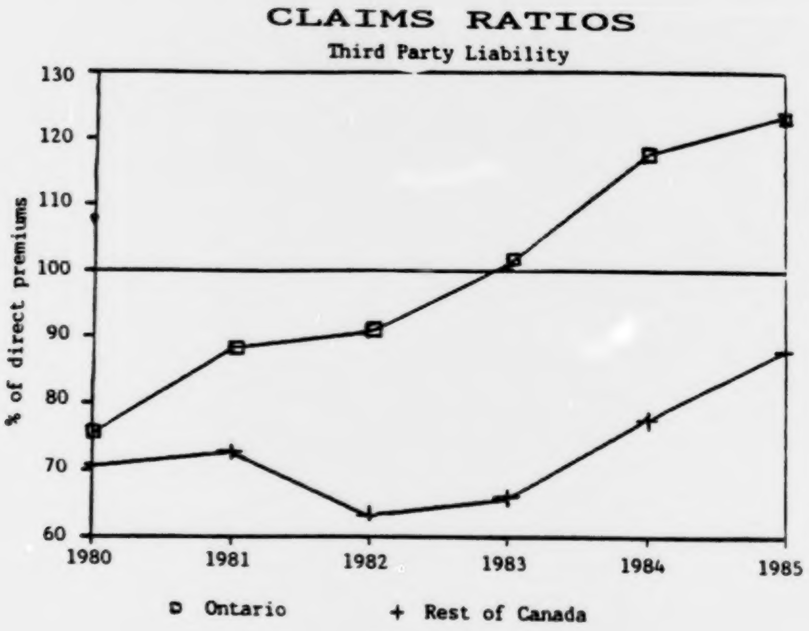


Figure 2A

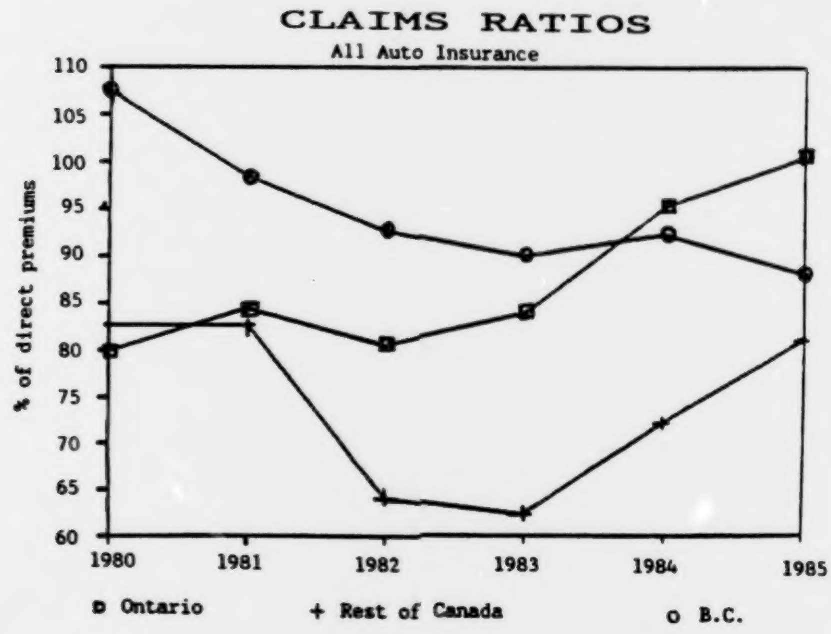


Figure 2B

the claims ratio for Ontario has deteriorated much more dramatically than that for the rest of Canada. However, after stabilizing at around 65%, the claims ratio for third party liability in the rest of Canada seems to have caught the Ontario disease and increased quite dramatically in 1984 and 1985. Overall, coverage for third party liability seems to be an existing problem for insurance companies within Ontario and an emerging one for the rest of Canada.

Figure 2B shows the overall claims ratios for automobile insurance in Ontario, British Columbia and the rest of Canada (which again excludes B.C., Saskatchewan, Manitoba and Ontario). This 'total' picture shows the increase in overall claims ratios both in Ontario and the rest of Canada. However, given the previous information, it is apparent that the increase in the overall claims ratio is primarily the result of an increase in the claims ratio for third party liability. Of interest is the observation that the overall claims ratio for B.C. has exhibited a decreasing trend over time, with none of the instability exhibited by the claims ratio in Ontario and the rest of Canada. The other public sector insurers, MPIC and SGI will be analyzed along with ICBC in Chapter III.

One final note is that the claims ratio is a ratio, that is, it is total claims and adjusting costs divided by a measure of premiums written. Hence, there are two important implications. The first is that instability can be generated by either costs or premium trends. The stability in the B.C. claims ratio, as we shall see, is largely the result of the stability in premium levels. The second implication is that the claims ratio is independent of the level of premiums. That is, if loss costs are twice as high in Ontario as elsewhere and premiums were also twice as high, then the claims ratio should be the same. Hence, the claims ratio says nothing about the efficiency of the insurance industry; it simply measures the adequacy of premiums relative to actual claims and adjusting costs.

B. Pure Premiums

The 1986 Automobile Insurance Experience (Green Book) contains details on the frequency of claims in each class and the average cost of settling the claims; the product of the two is called the pure premium. In essence, the pure premium gives the average charge for each class required to pay the claim and all adjusting costs. It does not include any allocation of corporate overhead, expenses or contribution from investment income. Moreover, within the class, the average quality of risk can change over time, for example as a result of a changing mixture of rural and urban driving in the overall Canada class. Hence, the pure premium cannot rightly be used as the cost of a particular class of insurance. However, it does provide some very important raw data to describe experience across different provinces and classes of risk.

In Table 4 is the average frequency of claims for private passenger cars for the three representative classes of insurance: third party liability, personal accident and collision for the years 1982-1986. Note that differences occur across provinces partly as a result of provincial regulations and partly as a result of changes in the mixtures of risks covered. The two principal differences are that in Quebec third party liability coverage also includes own property damage under the direct compensation agreement and in Newfoundland, where accident benefits exclude medical payments, which are covered separately. If we exclude these anomalies, it is apparent that claim frequency varies, sometimes significantly, across the provinces.

TABLE 4

Claims Frequency
(Average 1982-86)

	Third Party	Accident Benefits	Collision
Alberta	0.0568	0.0064	0.0782
New Brunswick	0.0548	0.0074	0.062
Newfoundland	0.0578	0.001	0.0586
Nova Scotia	0.0496	0.0048	0.0614
Ontario	0.0578	0.012	0.0772
P.E.I.	0.0534	0.0044	0.0644
Quebec	0.0982	0.00085	0.0786
Northwest Territories	0.032	0.0026	0.0504
Yukon	0.0408	0.0042	0.0516

Source: 1986 Green Book

Excluding Quebec for the reasons stated above, the highest frequency of claims for third party liability is found in Ontario and Newfoundland with a claims frequency of 5.78%, i.e, on average 5.78 cars out of a hundred register a claim for third party liability each year. Similarly, for personal accident benefits the highest frequency is in Ontario at 1.2%. For collision, the highest frequency is in Quebec (7.86%) and Alberta (7.82%), Ontario is third at 7.72%. The lowest frequency of claims is found in the Northwest Territories and then in the Yukon with claims frequencies of 3.2%, 0.26%, 5.04% and 4.08%, 0.42%, 5.16% respectively for third party, personal accident and collision. Figures 3A and 3B give the time pattern of the claims frequency for the provinces (excluding Quebec). These indicate no clear trend in the claim frequency.

If all claims cost the same, then logically we would expect premiums to be, on average, highest in Ontario, Alberta and Quebec, lowest in the Northwest Territories and the Yukon and somewhere in between for Nova Scotia, New Brunwsick, Newfoundland and Prince Edward Island. The claims cost shown in Figure 4 indicate that they are not the same in all provinces.

Ontario has the highest claims cost for third party liability with a 1982-1986 average claim cost of $4,126; the only other jurisdictions that come close are the Northwest Territories and the Yukon with average claims cost of $3,640 and $3,081 respectively. Note that Quebec's low average cost of $1,147, as previously mentioned, is the reverse of its high claims frequency since the figure includes own property damage. Ontario also has the highest claims cost for personal accident benefits except for Quebec. Moreover, Quebec's claims cost is unrepresentative, since only four claims were registered in 1986. In contrast, Ontario's average claims cost for collision insurance at $1,320.40 is the lowest of all provinces.

The interpretation of these basic statistics is quite straightforward. Ontario has a relatively large number of accidents, as reflected in the claims frequency. However, the costs of meeting claims for collision, i.e., repairing cars, etc., after the deductible is relatively low. Where Ontario has problems is in third party liability and personal accident coverage, both of which have relatively

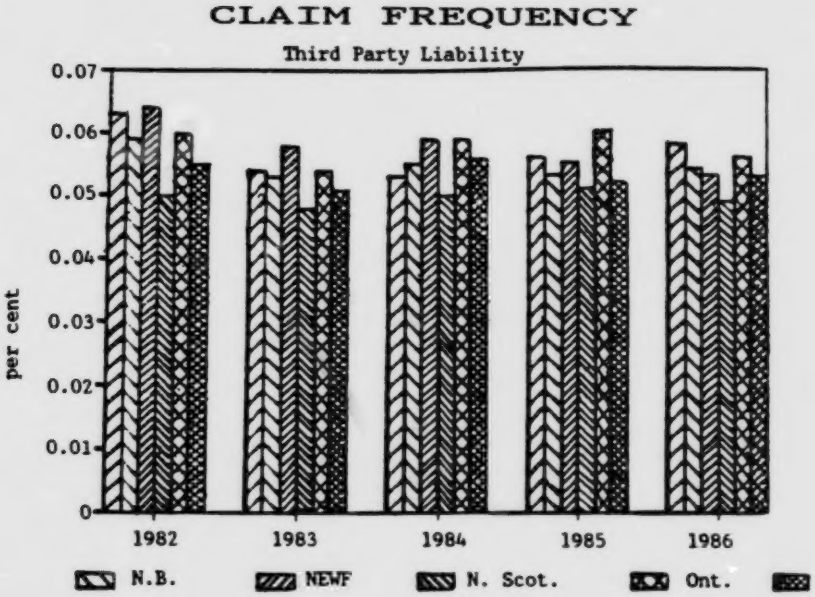


Figure 3A

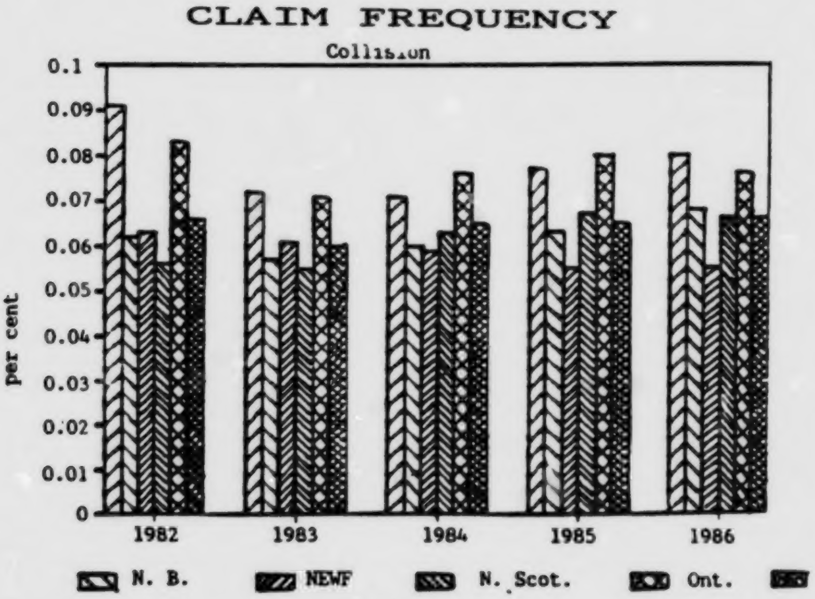
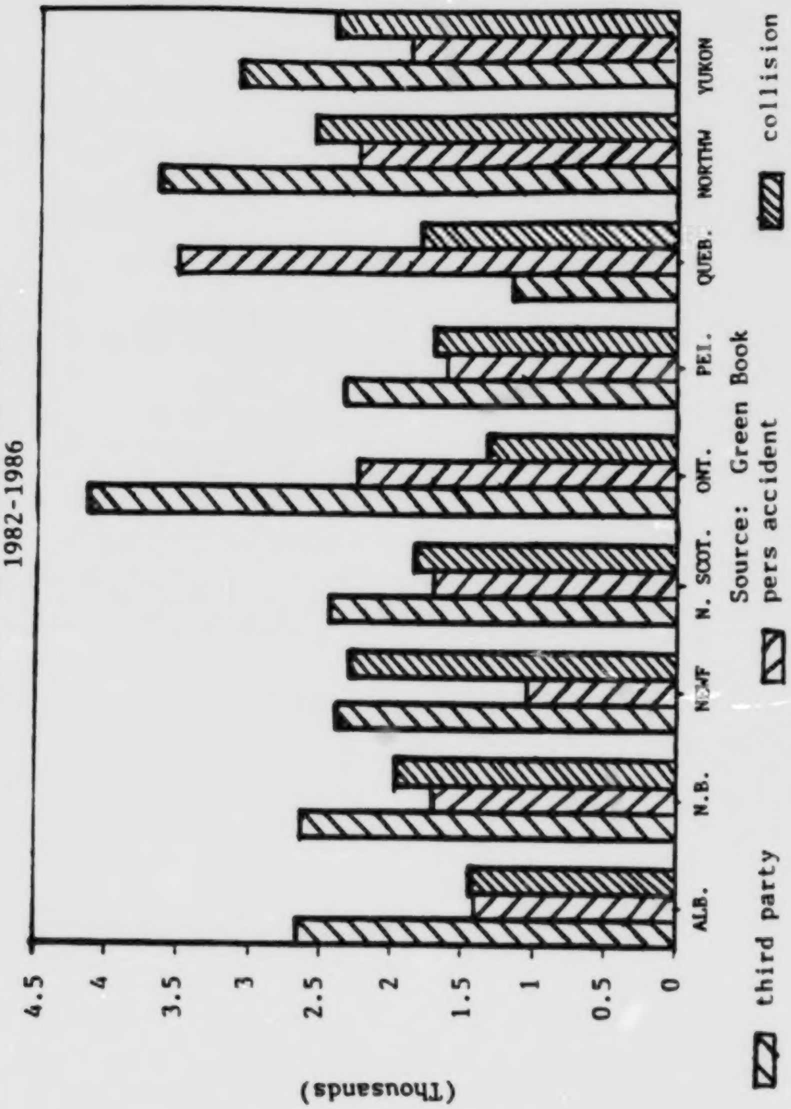


Figure 3B

AVERAGE CLAIMS COST

1982-1986



Source: Green Book

FIGURE 4

high claims costs. If we put the claim frequency together with the average claim cost, we get the pure premiums as shown in Table 5A and Table 5B respectively.

TABLE 5A

Claims Costs ($)
(Average 1982-86)

	Third Party	Accident Benefits	Collision
Alberta	2647	1415	1425
New Brunswick	2629	1700	1955
Newfoundland	2377	1045	2284
Nova Scotia	2434	1703	1834
Ontario	4126	2242	1320
P.E.I.	2343	1625	1699
Quebec	1147	3520	1794
Northwest Territories	3640	2242	2551
Yukon	3081	1870	2392

Source: 1986 Green Book

Ontario's pure premium for third party liability is $238.1, $27.0 for accident benefits and $101.8 for collision. The pure premium for collision is lower than for the other jurisdictions and the personal accident pure premium is small. This means that when we construct an average pure premium consisting of coverage for third party liability, personal accident and collision, Ontario's average of $366.9 is $89.3 more than for the next highest province.

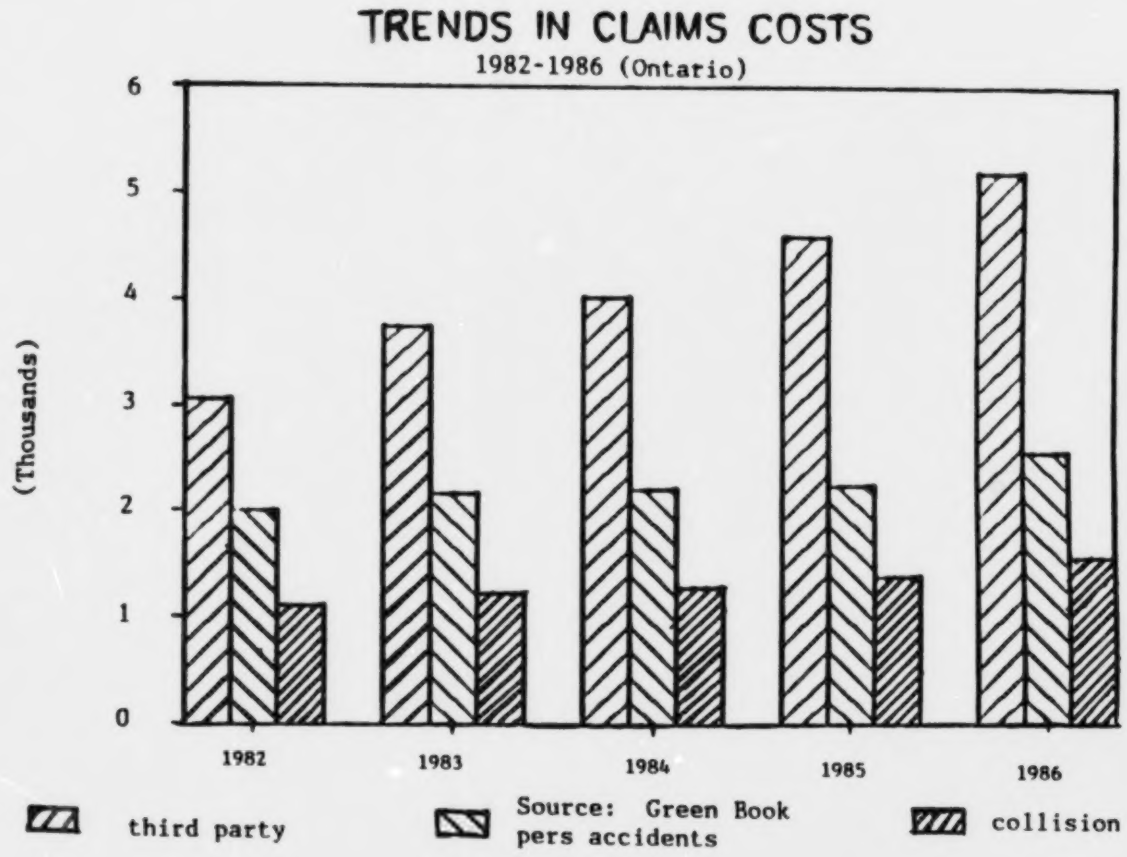
Moreover, while it is appropriate to calculate average claim frequencies because no trend seems to be evident, the claims costs themselves have not been stationary. Figure 6 provides the trend in claims costs for Ontario from 1982-1986. Clearly, the cost of settling third party liability claims has risen much faster than for claims for personal accident benefits or collision. Over the five year period, third party liability claims costs in Ontario have grown by 70%, personal accident benefit costs by 27.1% and collision costs by 38.3%. Hence, in Table 5B the 1986 pure premium is in excess of the average for 1982-86 for all jurisdictions, except for the Northwest Territories. For Ontario the 1986 pure premium is $442.1, which is $110 higher than for the next highest province.

TABLE 5B

Pure Premiums

	Albt.	N.B.	Nfld.	N.S.	Ont.	P.E.I.	Que.	N.W.T.	Yuk.
Third Party Liability	150.2	143.6	136.3	120.6	238.1	124.5	112.9	116.5	123.0
Personal Accident	9.1	12.6	1.0	8.7	27.0	7.5	3.4	5.6	8.2
Collision	111.5	121.4	133.5	112.7	101.8	109.4	141.4	128.0	123.2
Average Premium	270.7	277.6	270.8	242.0	366.9	241.4	257.7	250.1	254.4
1986 Pure Premium	318.9	331.5	289.1	296.3	442.1	209.8	289.9	221.1	276.0

Source: 1986 Green Book



Source: Green Book

FIGURE 6

Pure premiums, it should be reiterated, are not what the policies should cost. They do not include any expenses allocated or incurred, or investment income, and no allowance is made for changes in the quality of the risks over time. However, they do indicate that the basic building blocks for determining the level of insurance premiums should vary across the different provinces. Some of the differences in claims frequency and claims costs are just statistical differences due to particular experience and should be ignored, since they do not reflect expected values. However, what cannot be ignored is that the overall pure premium for Ontario is substantially higher than for any other province. Moreover, this difference is not caused by claims frequency or the cost of repairing the vehicle owned by the policyholder, but by the cost of meeting third party claims for bodily injury and property damage.

C. Operating Expenses

After claims costs the second major cost component for a casualty insurance company is its operating costs. Each year the Insurance Bureau of Canada collects data from the major insurance companies in Canada that in aggregate write about 95% of total premium income. This data is then circulated to interested parties on an aggregated basis. The aggregate data for 1985 is shown in Table 6.

Two key points are important. First, the data consists of both variable and fixed costs, for example commissions and taxes are largely variable costs while licence fees and other operating costs are largely fixed. Second, rather than the classic distinction between variable and fixed costs, the industry distinguishes between claims adjustment costs and general expenses. This is because the adjustment costs are directly associated with the settlement of claims on behalf of policyholders, while general expenses are the costs of maintaining the operation that are not returned directly to the policyholder.

Although, arguably, this difference is one of semantics, since the general expenses are required to service the policyholder just as much as the adjusting costs, 'politically' a low general expense ratio has been used to impute 'efficiency'.

TABLE 6

All Canada Expense Ratios

All Companies 1985

	Personal	Property	Auto	Other	Total
Commissions	20.6	19.9	11.7	18.2	15.6
Taxes	3.3	3.2	2.9	2.6	3.0
Licences & Fees	0.5	1.2	0.5	0.4	0.6
Other Operating Expenses	12.5	14.8	9.9	10.9	11.3
Total	36.8	39.0	25.0	32.1	30.4
Internal Claims Adjustment	5.5	3.0	6.6	3.3	5.5
External Claims Adjustment	3.8	3.9	4.6	11.1	5.1
Total Claims Adjustment	9.3	6.9	11.2	14.4	10.6

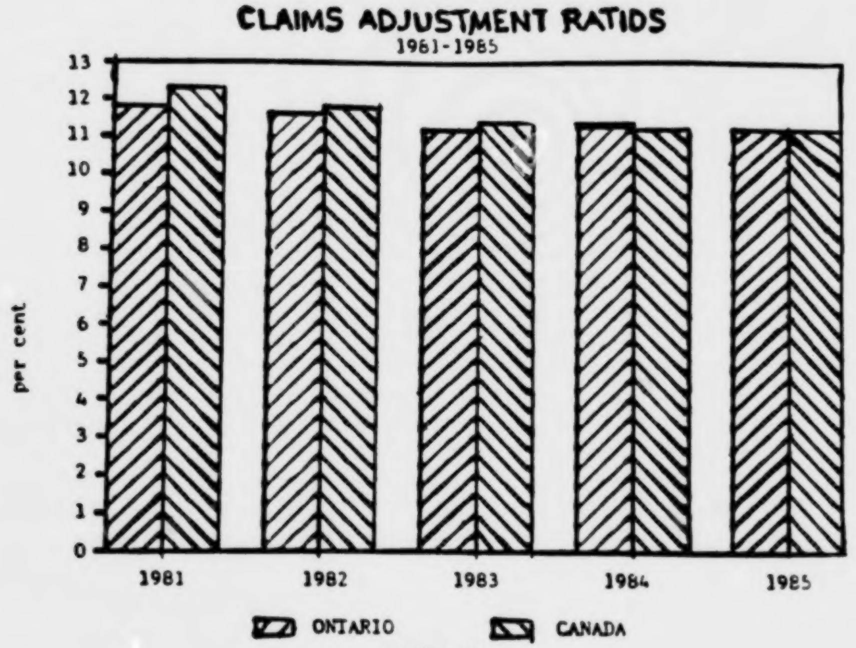
Source: IBC. Expense Allocation Program Results, 1985

We will talk more about the components of these costs shortly, but the first important observation from Table 6 is that the expense ratio based on net premiums earned differs across different segments of the insurance industry. Personal lines coverage, for example, has a general expense ratio of 36.8% and a claims adjustment ratio of 9.3%, whereas the automobile general expense ratio is only 25% and its claims adjustment ratio 11.2%.

This realization that expense ratios differ across different types of insurance lines causes problems in analyzing pure automobile expense ratios. This is because there are very few pure automobile insurance companies and as a result company expense ratios will reflect the particular product mix of the company. That is, a company writing 50% personal lines coverage, 30% other property and 20% automobile coverage should have a different expense ratio than a 100% automobile insurance company. As a result, the only expense ratio data for pure automobile coverage is that provided by the IBC in its annual summary, which unfortunately does not allow us to directly examine the relationship between the size of the company and the behaviour of the expense ratio.

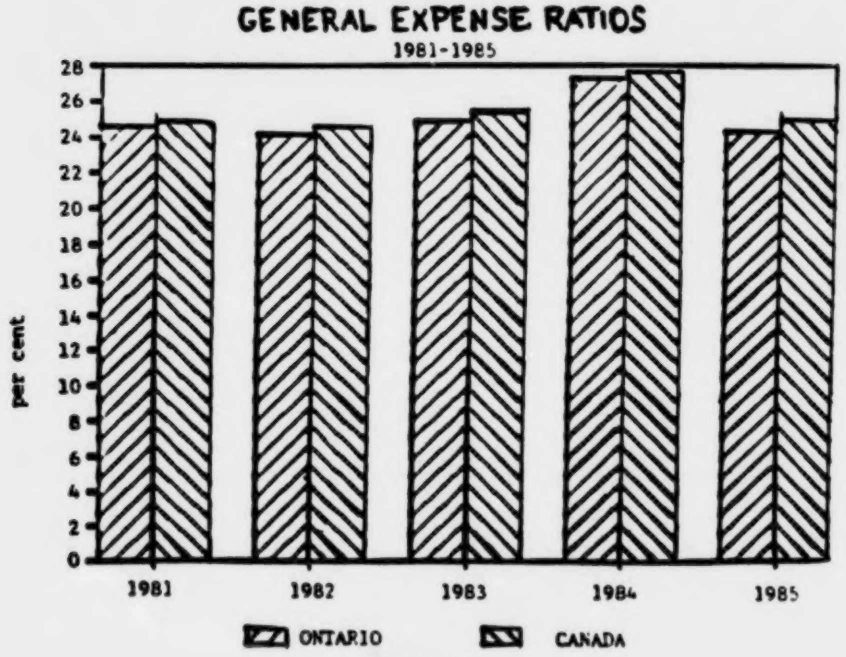
A second implication of Table 6 is that the overall expense ratio for automobile coverage is the lowest of the four major lines at 36.2%, compared to 46.1% for personal lines, 45.9% for other property and 46.5% for other coverage. Moreover, the automobile coverage has the highest relative mix of claims adjustment costs to general expenses at 0.45 (that is 11.2%/25%) whereas the other lines were 0.25, 0.18 and 0.45 for personal, property and other respectively. The interpretation is that not only is the overall expense ratio lowest for automobile coverage, but no other line has a higher proportionate payout in direct claims adjustment costs.

Figures 7A and 7B give the trend in the auto claims adjustment ratio and the general expense ratio since 1981 for Ontario and Canada as a whole. As expected, the ratios are relatively stable. The claims adjustment ratio has come down slightly over time from 11.8% in 1981 to 11.2% for Ontario and from 12.3% in 1981 to 11.2% for Canada as a whole. In contrast, the general expense ratio has remained reasonably constant averaging 25.1% for Ontario and 25.5% for Canada as a whole. Overall, the expense ratios appear to be slightly lower in Ontario than



CLAIMS ADJUSTMENT RATIOS
1981-1985

FIGURE 7A



GENERAL EXPENSE RATIOS
1981-1985

FIGURE 7B

Canada as a whole, a result that would be even stronger if we could back out Ontario's results from the Canada-wide results to get a 'rest of Canada' ratio. Given the recent trend, reasonable expense ratios for Ontario would seem to be 11.2% and 24.5% for the claims adjustment and general expense ratios respectively. We will discuss briefly in an appendix whether or not the general expense ratio varies with the scale of the firm.

In Table 7 we have the breakdown of the general expense ratio for Ontario in 1985. On average, servicing the agency network and acquiring policies cost 17.5% on a fully attributable cost basis, settling and processing claims internally 6.4%, settling and adjusting costs externally 4.8% and underwriting and policy processing 6.8%. However, these expense ratios include an allocation of 4% for general administration and also 0.9% for home office overhead. This allocation is essentially arbitrary, since by definition fixed costs cannot be allocated directly to individual cost centres. However, the total amount involved is small relative to the total expense ratio of 35.5%.

Table 8 gives the expense ratio breakdown for the other provinces. Overall, it appears that the total expense ratio is around 36% except for Quebec, Manitoba and Saskatchewan and Nova Scotia. Manitoba and Saskatchewan will be discussed later, since the ratios here, as for B.C., cover extra coverage provided by private insurers and not the results for the public insurers. It is hard, as a result, not to believe that the general expense ratio for the automobile insurers in the different provinces is basically the same, with differences due to random changes in net premiums earned and the lumpiness of some types of costs from one year to another.

Within the overall expense ratio, there are some differences between the general expense ratio and the claims adjustment ratio across the provinces. Ontario, for example, seems to have a slightly higher claims adjustment ratio and a slightly lower general expense ratio. In contrast, B.C., Manitoba and Saskatchewan have the lowest adjustment cost ratios and a relatively high general expense ratio. However, given the essentially arbitrary nature by which the fixed costs have been allocated, very little can be made of these differences, especially in view of the similarity of the overall expense ratio.

TABLE 7

1985 Ontario Automobile Expense Ratios

	Agency and Acquisition	Settlement Processing	Underwriting and Policy Processing	General Admin'n.
Commissions	11.5			
Taxes	3.0			
Licences and Assessments	0.1		0.2	0.1
Salaries and Benefits	1.0	3.4	2.4	1.8
Rent, Taxes and Upkeep	0.2	0.3	0.4	0.4
Printing and Stationery	0.1	0.1	0.2	0.2
Home Office Expense	0.1	0.2	0.2	0.5
Auto and Travel	0.1	0.3	0.1	0.1
All Other Expenses	0.6	1.2	1.4	1.0
Total	16.8	5.1	4.9	4.0
Overhead Allocation	0.8	1.3	1.9	
Total Internal	17.5	6.4	6.8	
External Adjustment		4.8		
Total Claims Cost		11.2		

Source: IBC. Expense Allocation Program Results, 1985

TABLE 8

1985 Provincial Expense Ratios

	Agency Acquisit'n	Underwrit'g Policy Process'g	Claims Settlement & Process'g	External Adjustm't	Total
Quebec	17.9	8.6	7.1	4.6	38.3
Ontario	17.5	6.8	6.4	4.8	35.5
Manitoba/ Saskatchewan	21.4	9.1	6.9	2.7	40.1
Alberta	16.8	7.5	6.8	3.8	34.9
Newfoundland	17.6	7.5	6.3	5.5	36.9
P.E.I.	16.6	7.8	5.8	4.9	35.1
Nova Scotia	18.6	8.2	6.1	5.3	38.2
New Brunswick	17.5	7.4	6.4	4.7	36.0
British Columbia	18.0	9.4	5.1	3.2	35.7
Yukon & N.W. Territories	15.1	7.9	5.6	6.4	35.0
Average					36.6
Standard Deviation					1.8

Source: IBC. Expense Allocation Program Results, 1985.

D. Investment Income

The final component of the underwriting results is the allocation of investment income. As the model of Chapter II showed, the correct amount of investment income to allocate to the underwriting results is the product of two factors: the amount of free investment dollars per dollar of premium income (what we previously labelled γ) and the risk-free interest rate. The reason for the former is that every dollar of premium income automatically gives rise to funds which can be invested prior to the final settlement of all claims. The reason for the latter is that in aggregate the return from casualty insurance is largely 'unsystematic' and not priced in security markets. Hence, the funds that are invested prior to the settlement of claims should earn the risk-free interest rate.

This latter treatment of investment income is very important. Implicitly, the argument is that the policyholders are entitled to a return on the use of their funds prior to claims settlement, and that competition amongst insurance companies will ensure that they receive it. The result is to treat casualty insurance companies as investment companies with access to risk-free borrowing from policyholders, with competition forcing them to pay the risk-free rate on this borrowing. In Table 9 we have the aggregate balance sheet data for all Canadian casualty insurers for 1985. This total may include a small amount of non-Canadian business, but this is unlikely to affect the ratios that we are interested in. In order to divide all the amounts into the aggregate totals that are of interest we need to make some assumptions. For our purposes, we include the reserves required by the Federal Superintendent of Insurance's office as common equity. These reserves against non-admitted assets, certain investments and foreign exchange and unregistered reinsurance represent a part of equity that is specifically allocated as a reserve against certain contingencies. However, the funds have still been provided by the stockholders and are invested on their behalf. Similarly, contingency reserves and deferred income taxes are included in equity. As a result, for 1985, 'free' liabilities represented 74.46% of total assets and equity 25.54%.

On the investment side the following accounts are classified as investments: term deposits, bonds, mortgages, loans, preferred shares, common shares, real

TABLE 9

Combined Balance Sheet: Canadian Casualty Insurers

$Millions

Cash*	217.2	Accounts Payable	815.6
Premiums Receivable*	805.0	Unpaid Claims	4,420.8
Due from Subsidiaries*	164.4	Unearned Premiums	2,583.9
Investment Revenue Due	142.7	Unearned Commissions	3.7
Other Receivables*	390.0	Other Policy Premiums	49.7
Term Deposits	801.9	Other Liabilities	82.6
Bonds	4,837.0	Total Liabilities	7,956.3
Mortgage Loans	320.9	Deferred Income Taxes	29.3
Preferred Shares	850.8	Reserves for Non-Admitted Assets	200.0
Common Shares	1,020.5	Reserves for Investments	4.1
Real Estate	343.3	Reserves for Reinsurance	122.8
Other Investments	18.1	Total Reserves	349.2
Investments in Subsidiaries*	210.9	Capital Stock	1,083.3
Deferred Policy Acquisition*	421.3	Earned Surplus	1,222.9
Other Assets*	140.8	Contingency Reserves	43.9
Total Assets	10,684.8	Total Liabilities	10,684.8

Source: Federal Superintendent of Insurance 1985.

*Assumed Insurance Assets

estate, other investments and investment revenue due and accrued. All other accounts are classified as necessary 'insurance' accounts. That is, they are essentially non-interest bearing accounts that are required as a result of doing business as an insurance company. The only controversial account is cash, which is obviously required to function as an insurance company, but also exists for a pure investment company, since 100% full investment in securities is in practice impossible to achieve. Cash in our tables is classified as an insurance account, which in total aggregate to 21.99% of total assets. Since 74.46% of total liabilities are free and 21.99% of those liabilities are invested in non-interest bearing insurance assets, net free liabilities available for investment purposes are 52.47% of total assets.

For 1985 total net premiums earned were $5,115 million, which means that the 'sales turnover ratio' for the industry as a whole was 0.48, that is, each dollar of assets generated on average 48 cents in net premiums earned. If we divide the net free liability ratio by the sales turnover ratio, we get the net free liabilities per dollar of net premiums earned, which in 1985 was 1.096. This ratio of 1.096 means that on average every net premium dollar earned provided the casualty insurer with $1.096 in free liabilities that could be invested to earn investment income. The reason for the number being greater than one is that the policy will likely be closed out several years in the future, when all claims will be finally settled.

Table 10 gives the breakdown of the free liability ratio, the net insurance assets ratio, the net free liability ratio, the turnover ratio and the net free liability per dollar of premium earned ratio for Canadian, British and foreign insurance companies for 1981-85. Note that the ratios are significantly different across the different types of insurance companies, mainly because of the differences in the types of insurance written. British insurance companies, for example, are much more heavily exposed to reinsurance and marine insurance, which results in a smaller proportion of insurance assets and as a result, a larger proportion of investment assets. In contrast, Canadian insurers are more exposed to automobile insurance with its higher claims ratio and thus larger proportion of free liabilities (i.e., more reserves for future claims settlement).

TABLE 10

Investment Income Results

A. Canadian Companies	1985	1984	1983	1982	1981
Free Liability Ratio(%)	74.5	72.8	71.2	71.7	72.5
Insurance Asset Ratio(%)	22.0	21.2	19.3	22.3	21.9
Net Free Liability Ratio(%)	52.5	51.6	51.9	49.4	50.6
Turnover Ratio	0.48	0.50	0.51	0.53	0.51
Net Free Liability Per Dollar of Premium Earned	1.096	1.031	1.02	0.936	0.989

B. British Companies					
Free Liability Ratio(%)	66.9	66.1	63.9	70.3	73.6
Insurance Asset Ratio(%)	17.0	8.4	9.2	10.5	9.0
Net Free Liability Ratio(%)	49.9	57.6	54.7	59.8	64.5
Turnover Ratio	0.56	0.57	0.59	0.65	0.59
Net Free Liability Per Dollar of Premium Earned	0.896	1.02	0.925	0.915	1.09

C. Foreign Companies					
Free Liability Ratio(%)	61.2	57.9	57.5	57.5	58.9
Insurance Asset Ratio(%)	10.4	9.7	9.81	9.5	9.1
Net Free Liability Ratio(%)	50.8	48.2	47.7	48.0	49.8
Turnover Ratio	0.37	0.37	0.38	0.39	0.35
Net Free Liability Per Dollar of Premium Earned	1.36	1.31	1.24	1.24	1.42

Source: 1985 Federal Superintendent's Report.

The overall 1985 average of the free liabilities per dollar of net premium earned, calculated by using net premiums earned as the weights, is 1.14. This is a reasonable proxy to use for automobile insurance, since reliable balance sheet ratios are not available for any 'pure' automobile insurers. The investment return on these 'free liabilities' is the risk-free rate of interest. Since the liabilities will exist as long as the insurer stays in business, the appropriate rate is the yield on a perpetual Government of Canada bond. Unfortunately, there are no perpetuities issued by the Government of Canada; instead we use the average rate on over 10 year Government of Canada bonds published in the *Bank of Canada Review*. For 1985 this rate averaged 11.11%, which means that the product of this rate and the net free liabilities per dollar of premium earned, 12.67%, is the investment return which should be allocated to the underwriting results of a tax-free insurance firm for 1985.

This procedure is repeated for each year back to 1981 in Table 11. Note that there are some minor changes in the free liabilities ratio from year to year, as we would expect, since all of the asset and liability accounts will not change equally with net premiums earned. Clearly, however, the 'steady state' is in excess of one. Similarly, the financial markets have been noticeably unstable since the late 1970s, so that the yield on long Canada's has varied quite considerably. As a result, the investment income that should be added to the underwriting results of a tax-free firm varies from a low of 12.06% in 1983 to a high of 16.83% in 1981.

To adjust the above results for a car insurance firm paying corporate income taxes, we use the model developed in equation (17). However, we have no way of estimating the appropriate tax rate to apply to an insurance firm's automobile operations. Therefore, we use the Department of Finance's estimate (*Tax Reform 1987: Lower Rates Fairer System*, June 18, 1987) for financial institutions and insurance companies of about 15%. Hence in Table 11, row four gives the grossed-up investment income per dollar of NPE $(r\gamma/(1-t))$, row five the tax effect term $(-((1+\gamma\alpha)/\alpha)rt)/(1-t)$ and the final row the total investment income contribution for a private insurance firm paying taxes at 15%.

TABLE 11

Investment Income to Allocate To Underwriting

	1985	1984	1983	1982	1981
Free Liabilities Per Dollar of N.P.E.	1.14	1.10	1.07	1.01	1.10
+10 Year Canada Bonds	11.11	12.74	11.27	14.36	15.03
Investment Income (no tax) Per Dollar of N.P.E. (%)	12.67	14.0	12.06	14.50	16.83
Investment Income (tax) Per Dollar of N.P.E. (%)	14.91	16.47	14.19	17.06	19.8
Tax Effect	-2.89	-3.31	-2.93	-3.73	-3.91
Total	12.02	13.16	11.26	13.33	15.89

N.P.E. = Net Premiums Earned

E. Overall Results

Sections III(a), III(c) and III(d) have calculated the key ratios needed to analyze the profitability of underwriting since 1981 and Section III(b) the general level of those premiums. In Table 12 we put all of these results together and analyze the profitability of general casualty underwriting for Canadian, British and foreign insurance companies. Again, because of the differing product mixes the claims, expense and free liability ratios will differ across the three subgroups of casualty insurers. Clearly, however, 1985 was a bad underwriting year, since the real profitability was negative for all three subcategories of insurers, ranging from a loss of 7.1 cents per premium dollar for British companies down to 4.6 cents per premium dollar for Canadian companies. However, in earlier years underwriting was mostly profitable. Over the entire five year period average profits were -1.1 cents, 4.2 cents, and 2.3 cents for Canadian, British and foreign insurers respectively.

However, interesting though the overall results are, what is the main interest is the position of the automobile insurers in Ontario. This we can estimate by putting together the previous claims and expense ratios for Ontario automobile insurers with our overall average investment ratio. This data is in the bottom part of Table 12. This shows a dramatically different picture than the previous overall profitability picture, with profits in 1981 of 6.8 cents per premium dollar, declining almost annually to losses of 13 cents per premium dollar in 1985. This data is indicative only of underlying automobile insurance profitability, since as the corporate tax rate increases, this already gloomy picture gets even worse.

Table 12 also allows us to interpret how these losses have developed. In 1981-2 substantial investment income was earned because of high nominal interest rates and the attraction of enhancing investment income by writing more policies. Plausibly, the attractive investment income led to competition for premium dollars that kept policy rates down. However, as rates came under competitive pressure the claims ratio continued to rise, mostly as we have seen due to dramatically higher claims for third party liability for bodily injury and property damage. The "lid came off the pot" with the parallel lowering of nominal interest rates and the consequent decline in the contribution from investment income. This double conjunction of lowering investment income and a rising claims ratio inevitably led to a need to increase premiums. However, it appears that after premiums were cut during the high nominal interest rate period, they were not subsequently increased fast enough to compensate for both the increasing claims ratio and the decline in investment income. Note that throughout this period the expense ratio was reasonably constant and played no role in the competitive squeezing and subsequent expanding of automobile insurance rates.

TABLE 12

Underwriting Profitability

Canadian	1985	1984	1983	1982	1981
Claims Ratio	.808	.759	.732	.815	.845
Expense Ratio	.353	.348	.334	.338	.336
Investment Income $/NPE	.115	.124	.108	.126	.140
Underwriting Results	-.046	.017	.042	-.027	-.004
British					
Claims Ratio	.800	.686	.592	.692	.739
Expense Ratio	.358	.338	.355	.356	.370
Investment Income $/NPE	.093	.122	.098	.123	.156
Underwriting Results	-.071	.073	.141	.064	.003
Foreign					
Claims Ratio	.855	.775	.742	.797	.875
Expense Ratio	.344	.316	.317	.332	.314
Investment Income $/NPE	.145	.159	.133	.170	.204
Underwriting Results	-.054	.038	.074	.041	.015
Automobile Insurance					
Claims Ratio	1.007	.952	.839	.805	.845
Expense Ratio	.243	.259	.25	.242	.246
Investment Income $/NPE	.120	.132	.113	.133	.159
Underwritng Results	-.129	-.079	.024	.086	.068

NOTE: Claims ratio includes all claims adjusting expenses.

Source: Calculated and Federal Superintendent's 1985 report.

APPENDIX: ECONOMIES OF SCALE IN UNDERWRITING

The cost function for a casualty insurer was represented in Section II(A) as

$$C = LP+vP+F \qquad A(1)$$

where L and v were the Loss (claims) ratio and variable costs respectively, F the fixed costs and P the net premiums earned. No distinction at that time was made between short and long run costs. Clearly, if A(1) is a short run cost function, then average cost can be represented by dividing A(1) through by P, i.e.

$$C/P = L+v+F/P \qquad A(2)$$

in which case average cost decreases with the net premiums earned and marginal cost (L+v) is below average cost.

The cost function in A(1) may be representative in the short run, but in the long run even fixed costs are variable. As a result, with the increased net premiums earned, i.e., an increase in scale, firms will tend to increase their fixed costs since they find that they cannot continue to operate at a higher level of business with the same staff, buildings and support equipment.

This is illustrated in figure A1. Initially, the firm may be writing P_1 in policies with average cost LRAC which is the long run average cost. In the short run, the firm may be able to expand operations to P_2, increasing its short run costs to $SRAC_1$, as it pays overtime wages etc. However, as the strain of operating on limited resources begins to have effect the firm will expand its support staff thus increasing its fixed costs, reducing its variable costs and shifting its short run average cost curve to the right. In our example, we have assumed constant long run average cost, so that the SRAC shifts to the right until it intersects the LRAC at P_2. The reverse happens if a firm reduces output. Its short run average cost increases to $SRAC_0$, but over time it will slim down and reorganize, thus driving down its fixed costs and shifting the SRAC to the left until it too is producing at the assumed LRAC.

The result of this sort of model is that when we observe average costs we will observe long run average

SHORT AND LONG RUN COST BEHAVIOUR

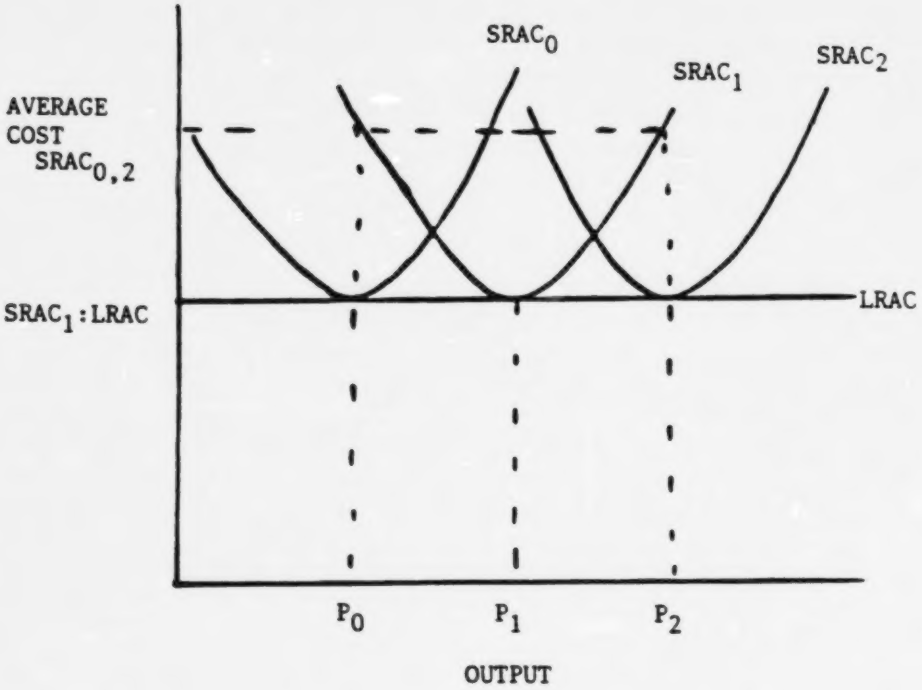


FIGURE A1

cost plus an increase or decrease depending upon whether the firm is expanding or reducing output. If long run average costs are constant, which means constant returns to scale, then we will observe the long run average cost plus random error, and this LRAC will be unrelated to scale.

This gives us a testable hypothesis: is average cost related to scale? In the case of casualty insurance companies it is clear that the claims ratio is independent of scale, what is left is the expense ratio which includes short run variable costs such as commissions and premium taxes and short run fixed costs such as training, office expenditures, support personnel, etc. Since we do not have pure automobile insurance results, we have to use the overall results, which reflect the particular product mix of individual companies.

If we use the 1985 report of the Federal Superintendent of Insurance, we find for the 93 Canadian companies that

$$\underset{(26.48)}{y = 42.28} - \underset{(2.93)}{0.0000485\ \text{NPE}} \qquad \text{(A1)}$$

$$R^2 = 7.6\% \qquad n = 93$$

where y is the expense ratio and NPE is net premiums earned and the numbers in parentheses are the t statistics. This appears to imply that as the scale increases i.e., higher levels of net premium earned, then the expense ratio declines, since the slope coefficient is negative and significant at the 5% level.

The problem with the above regression results is model mis-specification, since the expense ratio is found as total expenses divided by net premiums earned. Hence, net premiums earned appears as part of the dependent variable as well as the independent variable. That is, the equation is really

$$Y/\text{NPE} = \alpha + \beta\ \text{NPE}$$

where Y is now total expenses. Obviously, as NPE increases you could introduce spurious negative correlation into the regression.

An alternative regression is to use total expenses as the dependent variable. The problem is then that the errors are no longer distributed multivariate normal. The larger firms will have greater deviations from the model, a problem known in econometrics as heteroskedasticity. To correct for this, we run the regression $Y=\alpha+\beta NPE$ by dividing both sides by NPE to get homoskedastic error terms. The results of this regression

$$y = \alpha/NPE+\beta \qquad \text{(A2)}$$

are

$$y = \underset{(6.039)}{1311.7}\left(\frac{1}{NPE}\right) + \underset{(32.27)}{38.34}$$

$$R^2 = 27.8\% \qquad n = 93$$

However, there is no reason to believe that the underlying cost function is linear. It could equally be that $y=\alpha+\beta NPE+\gamma NPE^2$ indicating that total expenses increase or decrease more than proportionately with scale. If we correct this model for heteroskedasticity we get the results

$$y = \underset{(28.89)}{40.475} - \underset{(-2.669)}{3.81(D\text{-}05)}NPE + \underset{(5.85)}{1241.3}\left(\frac{1}{NPE}\right) \qquad \text{(A3)}$$

$$R^2 = 32.37 \quad n = 93$$

which is a better fit than the first model and indicates that the marginal expense ratio is 40.475-0.000076NPE, which falls with increases in net premiums earned.

The results of these simple tests would indicate the existence of economies of scale. However, we know from the Insurance Bureau of Canada's expense report data that expense ratios differ across different lines of insurance. Hence, the above scale effects could be due to a change in the composition of insurance as a company gets bigger. To test for this a simple regression of the percent of business coming from automobile insurance against NPE was run with the following results

$$\text{Auto \%} = \underset{(10.97)}{36.65} + \underset{(2.157)}{7.468(D\text{-}05)}NPE \qquad \text{(A4)}$$

$$R^2 = 3.85\% \qquad n = 93$$

which indicates that larger firms do have a higher proportion of automobile business and thus would tend to have lower expense ratios not because they are bigger, but because they do different kinds of business.

To remove this composition effect, the percentage of automobile business was included as an additional explanatory variable in our A3 regression with the following result

$$y = \underset{(24.54}{46.73} + \underset{(6.755)}{1306.1}\,\frac{1}{(\mathrm{NPE})} - \underset{(-1.844)}{0.000246\mathrm{NPE}} - \underset{(-4.42)}{0.173(\text{Auto }\%)}$$

$$R^2 = 43.9 \qquad n = 93$$

Note that the explanatory power improves yet again, but that the NPE term is now barely significant, since it fails the normal two tail significance level of 5%. If we drop NPE as an explanatory variable we get

$$y = \underset{(24.35)}{46.02} + \underset{(6.981)}{1355.42}\,\frac{1}{\mathrm{NPE}} - \underset{(-4.91)}{0.1897(\text{Auto }\%)} \qquad \text{(A6)}$$

$$R^2 = 42.5 \quad n = 93$$

which has basically the same explanatory power as model A5.

In Figure A1, we graph the regression models A3, A5 and A6. The models are labelled A, B and C respectively.

Clearly, the models have different implications for the existence of economies of scale. Model A indicates quite large scale economies, mainly because large firms have more auto business, that in turn results in lower expenses. When this factor is eliminated the scale economies are not so substantial. However, by removing the term involving NPE, although the regression model has almost the same explanatory power, the scale economies disappear.

The overall conclusion from examining this sample of firms is that the tests for scale economies are not conclusive. Given the different sizes of the firms, there is a substantial danger of mis-specifying the model and generating spurious results. When these problems are addressed it appears that a model indicating the absence of scale economies has almost the same explanatory power (42.5%) as one that indicates the existence of scale economies (43.9%). Hence, the overall evidence is that the main determinate of expense ratios is the composition of a firm's business rather than the absolute size of the company.

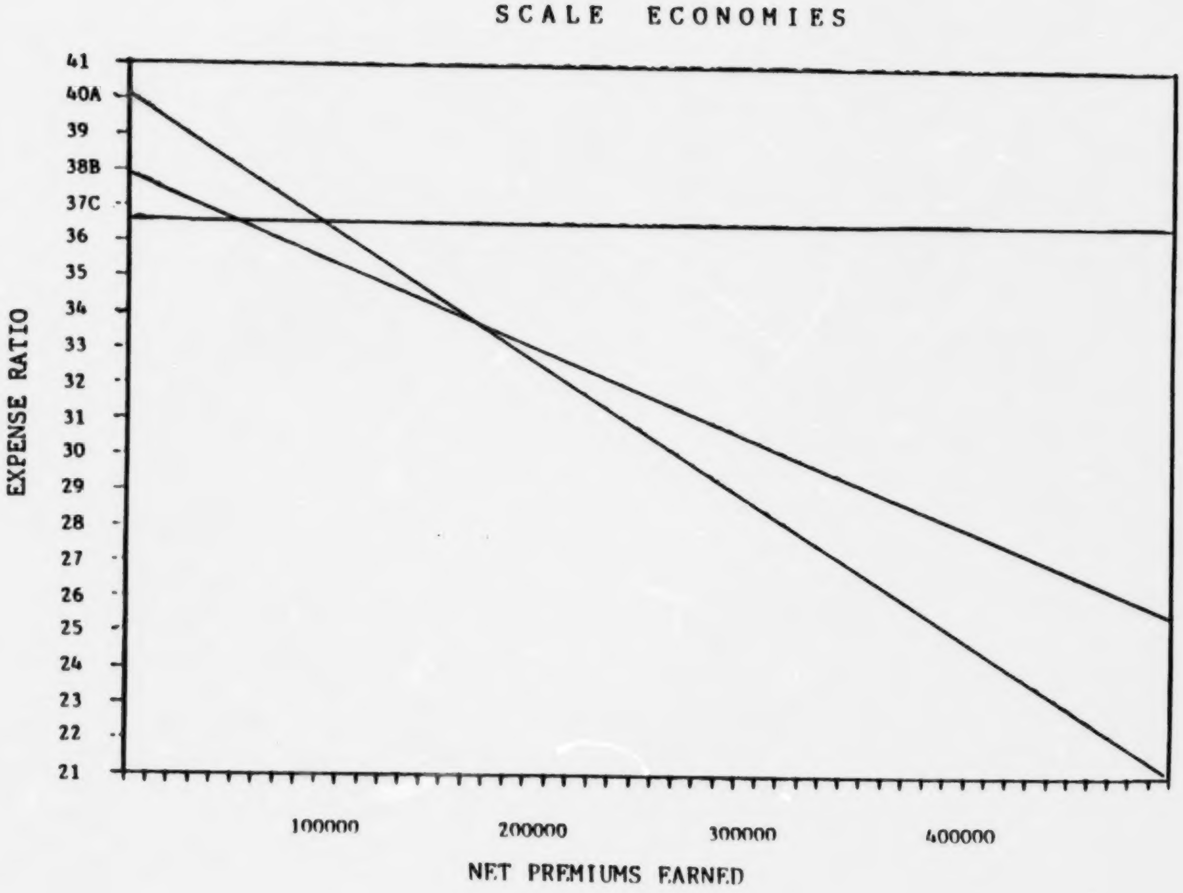

SCALE ECONOMIES
EXPENSE RATIO
41
40A
39
38B
37C
36
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21
100000
200000
300000
400000
NET PREMIUMS EARNED

FIGURE A1

IV. PRIVATE SECTOR RATE MAKING

A. Theoretical Background

We have seen in the model developed in Chapter II that the average cost of a premium is L+v+F/P, where L and v are the loss ratio and variable cost respectively and F/P is the fixed cost per dollar of net premiums earned. Moreover, by examining general expenses we showed that v+F/P was essentially a constant and independent of the scale of the firm. Since the firm has little control over its investment income, this leaves LP the pure premium, as the crucial competitive variable. However, firms do not compete on the basis of average risk.

Suppose Royal Insurance, for example, decided that average risk warranted an average pure premium of $300, but that Co-operators could divide risks more accurately into a high risk group that warranted a pure premium of $400 and a lower risk group that warranted a pure premium of $200. In this situation, Co-operators would be able to sell car insurance to the low risk group at $200, but not to the high risk group at $400. The reason being that once identified by Co-operators as high risk, this group would just go to the Royal and get coverage at $300, based upon the Royal's average classification of all risks.

Over time, the car insurance market would be allocated to the two firms with the low risk group going to Co-operators at $200 and being charged according to their risk, and the high risk group going to the Royal where they would be getting bargain insurance. Co-operators would be financially viable, since on average it is pricing its insurance fairly relative to its claims costs. However, the Royal would lose money since it is pricing on the basis of an average risk car insurance portfolio that in fact consists of all the high risks, since all the low risks have gone to Co-operators.

This example illustrates a fundamental tenet of a competitive industry: cross-subsidization of expensive services by charging more for cheaper services cannot survive. The firm that cross-subsidizes will lose all of its 'cheap' business, since it is overcharging its customers, and they will go elsewhere. The principle is as true for car insurance as it is for telecommunications, where the CRTC refused to allow CNCP to compete for Bell Canada's long-distance business on the grounds that competition would lower rates causing Bell Canada to lose the revenues required to subsidize local telephone service.

Once we recognize the competitive reasons for defining risks as accurately as possible, we can understand why no private car insurance company can offer an average rate for an average risk to enforce cross-subsidization. It also explains why the rate structure for private firms is so complex and why only public monopoly car insurers can have a simple rate structure that embodies cross-subsidization. Conversely, it also explains why public car insurers will not allow private competition, since in these circumstances the private insurers, like Co-operators in our example, will 'cream the market' and only take the good risks leaving the public insurer, like the Royal in our previous example, with all the bad risks.

B. Pure Premium Classes (loss costs)

Having established the reasons for the complex system of rate classification, it remains to look at the actual structure of pure premiums according to existing industry practice. Here, it is important to point out that all we can do is look at existing classes, since information is only available for those classes. The information gathered according to the new statistical plan, starting in January 1985, is not yet available and more years of experience are required before valid inferences can be made from the data.

The highest aggregated pure premium is the Canada-wide data (excluding the public plans) already discussed in Section II6. There we pointed out that for 1985 the pure premium for passenger cars for Ontario was $442.06 for an 'average' policy in 1986, whereas for the rest of Canada it was only $278.49. Clearly, here we have a basis for differentiating rates. Each policy written in Ontario will have, on average, a higher claims cost of $164. Hence, private insurance companies have to differentiate rates across provinces, otherwise pure Newfoundland car insurance companies could undercut national insurance company rates that were pricing on the basis of an average national risk.

Drawing a difference between the treatment of things or people (Websters) or discrimination seems acceptable on the basis of province. It would be nice (since I live in Ontario) if in the interests of national unity the Federal government could create one monopoly public car insurance company to price on the basis of average risk. This cross-subsidization of poor risks by good risks would benefit, as we will see, even good risks who happen to live in Ontario in general and Toronto in particular. However, such a national monopoly is impracticable, partly because the provincial differences are themselves partly caused by differences in provincial regulations (payouts for third party liability, etc.).

The geographical differences across provinces also show up within provinces. Table 13 gives the pure premiums for private passenger cars for Toronto and Northwestern Ontario, a region that includes Kenora (as well as Thunder Bay) as well as Ontario as a whole. For 1986 the actual loss cost per car insured, or pure premium, was $560.04 in Toronto versus only $293.02 in the Kenora region, a difference of $267.02, and over the five year period the Toronto region consistently has the highest pure premium by a wide margin, except for 1983 when the loss cost for third party liability was unusually high.

This last observation should remind us again that the pure premiums are actual losses, not expected losses. Hence, as we divide up the rate classification the variability in the pure premium will increase as the number of cars insured falls. For example, in Toronto 1,260,680 cars were insured for 1986 (the Green Book uses 'car years') versus only 43,433 for the Kenora region. As a result, a particularly expensive accident will have more impact on the Kenora figures than the Toronto figures. However, when setting rates these differences would be adjusted for.

The implication of the data in Table 13 is that there is substantial regional variation in pure premiums within Ontario. Car insurance rates set by private companies will reflect these differences in expected claims costs. Hence, even though it would be difficult to create a national public monopoly to cross-subsidize high risk drivers, it would be possible to create an Ontario public insurance monopoly. This monopoly might wish to treat all Ontario drivers 'fairly' and not discriminate against those drivers that happen to live in Toronto. In this case, drivers in Kenora would be subsidizing drivers in

TABLE 13

Toronto VS. Kenora Pure Premiums**

	1986	1985	1984	1983	1982
TORONTO					
Third Party*	372.48	340.00	299.03	258.18	223.20
Accident Benefits	46.05	40.50	36.06	29.35	27.09
Collision	141.51	130.85	113.35	101.09	109.07
Total	560.04	511.35	448.44	388.62	359.36
KENORA					
Third Party*	148.21	162.64	143.13	206.90	124.86
Accident Benefits	22.29	14.78	16.77	22.65	16.78
Collision	122.52	124.99	116.59	106.25	107.48
Total	293.02	302.41	273.49	335.8	249.12
ONTARIO					
Third Party*	292.67	273.57	236.76	203.29	182.49
Accident Benefits	32.89	29.69	26.02	23.00	21.11
Collision	117.76	111.05	99.17	89.07	93.56
Total	443.32	414.31	361.95	315.36	297.16

*Third Party Liability for Bodily Injury and Property Damage (BIPD).

**Private passenger cars excluding farmers.

Toronto to the tune of $116.72 per car, if all other costs were constant and the 1986 loss costs were taken as indicative of expected costs. Why anybody would want to enforce this cross-subsidization is difficult to determine, given the relative income levels in Kenora and Toronto.

Geographic data unfortunately does not allow further refinement because of the lack of sufficient numbers in each region for each subgroup. Hence, the additional subgroups examined are all for Canada-wide classifications. From the differences between Kenora and Toronto, however, it should be apparent that traffic density as reflected in the number of cars on a particular mile of road is an important factor in determining loss costs. This distinction at its broadest is an urban/rural distinction.

In Table 14 we have the Canada-wide figures for urban rural loss costs. Clearly, loss costs are lower in rural areas than urban areas. Plausibly, again, a private company could cross-subsidize urban drivers by forcing rural areas to pay higher premiums than are justified by the expected loss costs. However, this merely provides the incentive to set up a 'rural co-operative' to insure its members. Indeed, for 1986 the loss cost for Ontario farmers' private passenger vehicles was only $253.00, which was considerably lower than the Ontario average in Table 7 of $443.32, which excluded farmers. This difference provided some of the justification for the existence of farmers' mutual insurance companies.

By now the picture should be clear. Car insurance companies will continue to discriminate between drivers as long as the difference in expected loss costs justifies a further subdivision of the rate class, and the insurers believe that the difference is statistically significant. Otherwise, the insurance company will lose better risks to companies that can refine their rate classification. The implication of this is that the complex rate structure is indicative of a competitive industry, just as the simple structure of ICBC, MPIC and SGI is indicative of a cross-subsidizing public monopoly. Where the discrimination in any rate classification becomes unethical is a moral question. Clearly, any private car insurance company has to currently discriminate between Ontario and elsewhere in Canada, Toronto and Kenora, farmer and non-farmer and urban and rural. Otherwise, they would quickly become unprofitable and be forced out of business. Moreover, we can get into even more refinements of the rate structure.

TABLE 14

Urban-Rural Pure Premiums

	URBAN				
	1986	1985	1984	1983	1982
Third Party*	285.18	261.81	223.99	199.50	109.32
Accident Benefits	25.93	23.43	30.78	18.35	16.74
Collision	120.06	111.61	100.20	92.39	86.29
	431.17	296.84	344.97	310.25	212.36

	RURAL				
	1986	1985	1984	1983	1982
Third Party*	188.37	172.38	145.19	133.31	128.02
Accident Benefits	25.93	23.43	20.78	18.35	16.74
Collision	106.43	99.64	92.80	89.22	95.81
	320.73	295.45	258.76	240.88	240.57

*Third Party Liability for Bodily Injury and Property Damage (BIPD).

In Table 15 is the country-wide urban driving population divided up into five claims-free classifications ranging from zero years claims-free driving to over five years claims-free driving. Unfortunately, the accident benefits average loss cost cannot be so divided up, but assuming the same average cost, we get 1986 average loss costs of $386.89 for five years and over claims-free driving to $802.30 for someone with no years of claims-free driving.

TABLE 15

Years of Claims-Free Driving and Pure Premiums
Urban Private Passenger Cars Excluding Farmers

	1986	1985	1984	1983	1982
BIPD					
5 years	249.36	231.31	198.39	172.64	96.35
3 years	408.21	468.77	341.24	302.25	165.96
2 years	414.24	409.33	338.08	336.49	254.06
1 year	595.22	393.30	365.75	312.95	176.68
0 year	572.87	572.31	438.42	363.90	313.36
COLLISION					
5 years	111.60	105.17	92.68	85.04	78.16
3 years	177.50	160.81	141.28	131.62	133.75
2 years	146.01	146.22	126.39	121.70	152.42
1 year	153.89	146.16	131.98	117.34	198.00
0 year	203.51	122.36	173.37	124.91	152.56
ACC. BEN.	25.93	23.43	20.78	18.35	16.74
TOTALS					
5 years	386.89	359.91	311.85	276.03	191.24
3 years	611.64	653.01	503.30	452.21	316.45
2 years	586.18	578.98	485.25	476.53	423.22
1 year	775.04	562.89	518.50	448.64	391.42
0 year	802.30	718.10	632.57	507.16	482.66

There are several important implications of this classification structure. Note that quite frequently there is not a nice smooth increase in claims cost as the number of years of claims-free driving declines. For example, the over three years of claims-free driving has a higher loss cost for collision than the one and two years claims-free driving for every year from 1983-1986. The reason for this is that the numbers involved in this classification are relatively small. Fully, 84.6% of all the drivers (private passenger vehicles excluding Quebec and farmers) have over five years of BIPD claims-free driving. Only 10.45% have three and over, 1.55% two, 1.75% one and 1.68% zero years of claims-free driving.

Hence, when we are trying to refine the overall rate classification for this claim, which has an average loss cost of $431.16 (slightly different from the country-wide since it excludes Quebec) we can offer rates that would incorporate a $44.27 reduction for the 84.6% of the population who have over five years of claims-free driving, at the expense of a $271.4 increase for the 15.4% with less than five years of claims-free driving. The problem is that the high risk drivers who have such high loss costs are such a small proportion of the overall driving population. Hence, when they are extracted from the driving population, even though their loss costs are almost double the average, the gain for the rest of the driving population is relatively small (10%).

This general problem is also seen in the further rate classification subdivision where we move more directly to discrimination partly based on age, sex and marital status along with years of claims-free driving. The general subclassifications are listed in Table 16, but note that some of the actual loss cost experience is anomalous, mainly because of the relative size of the numbers in each group. For example, in 1980 there were only 948 unmarried males with no years of claims-free driving in the 23-24 age group. This makes some of this data less reliable than the loss costs for class 01 with five years of claims free driving that had 1,278,448 drivers outside of Quebec excluding farmers.

TABLE 16

Private Passenger Classification Descriptions

CLASS	DESCRIPTION
Principal Operator over 25, No Male Under 25, No Female Under 25 Without Driver Training	
01	Pleasure only, driving less then 16,000 km., two or fewer drivers all with a licence held for over three years.
02	Driving to work less than 16 km., two or fewer operators.
03	Over 16 km., driving to work, unmarried female occasional driver. Principal operator over 25.
Pleasure and Commute Or Business	
06	Occasional male driver under 25.
07	Business use, no male driver under 25.
Principal Operator Under 25	
08	20 and under married male.
09	21-24 married male.
10	under 18 unmarried male.
11	19-20 unmarried male.
12	21-22 unmarried male.
13	23-24 unmarried male.
Females - Married or Unmarried	
18	20 and under.
19	21-24.

Source: 1986 Green Book, pp. 120-121 abridged.

In examining Table 17 note that the good risks have been further refined. Whereas classifying solely on the number of years of claims-free driving resulted in the over five years class having a loss cost of $386.89, now within that class we find that those in class 01, i.e., pleasure drivers with no one under 25 driving, have a loss cost of $313.79. Hence, a private insurer can offer a premium reduction to those drivers and still be profitable: conversely, within the one year claims-free driving class, married males as principal operators who were under 20 had a 1986 loss cost of $3054.81. This number looks questionable when compared with class 08 drivers having five or more years of claims-free driving and the fact that there were only 69 cars insured in this class by private insurers in the whole of Canada, excluding Quebec. However, quite clearly classes 08-13, the young male driver classes had higher loss costs across the board than pleasure drivers in class 01.

The female young drivers in classes 18 and 19 have similarly poor loss cost experience. However, females between 21 and 24 had lower loss costs than their married or single male counterparts, except for the one year claims-free driving category. Hence, private insurers would offer a premium discount to females in their young driver category if they felt the actual loss costs were indicative of expected loss costs. In other words, discrimination based upon sex for young drivers seems to make sense and will inevitably be practised by any competitive car insurance company.

In Figure 8 we have a decision tree that shows some of the major refinements in discriminating between good and bad risks and the 1986 loss costs that were attached to each risk. Clearly, within each class the 1986 loss costs vary quite dramatically. Although the 1986 loss costs may not be indicative of true expected costs for those classes with relatively few cars insured, pooling over a number of years indicates that rate discrimination based upon age and then a further subdivision among the young drivers based upon sex and marital status is justified by experienced loss costs.

It is always a difficult problem for individuals to signal that they do not belong to a particular class. It is perfectly reasonable to believe that some under 18 year olds with no claims-free driving experience are not the

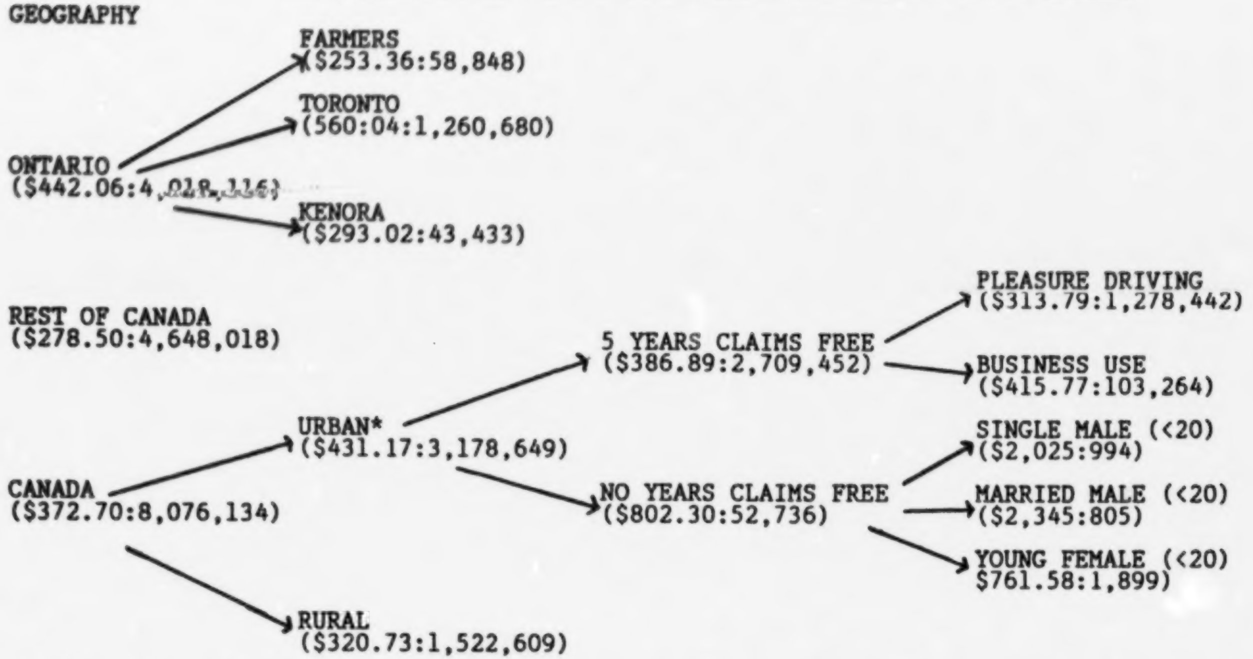
TABLE 17

Major Rate Classification Subgroups: Pure Premiums

Class	5 Years	3 Years	2 Years	1 Year	0 Year
BIPD					
01	199.94	387.22	356.34	363.89	510.07
02	233.02	426.95	388.88	483.81	491.42
03	251.68	376.78	310.93	274.87	678.17
06	224.00	111.15	120.92	171.19	194.73
07	244.81	456.15	381.20	308.57	614.12
08	1135.12	768.83	435.99	2027.78	1136.57
09	334.08	618.97	564.15	574.20	543.49
10	782.83	823.97	775.35	1325.02	1083.92
11	505.40	737.62	797.13	1375.12	1526.07
12	485.73	657.79	492.14	1042.78	815.28
13	408.54	608.93	1018.03	651.14	841.56
18	337.93	467.12	483.12	557.70	470.34
19	273.31	421.50	471.53	945.31	467.26
COLLISION					
01	90.47	156.30	116.70	125.81	130.50
02	101.33	172.84	155.04	169.77	166.44
03	117.42	169.19	141.68	157.22	219.14
06	79.09	41.76	51.89	71.92	120.00
07	147.58	219.52	183.98	187.21	215.89
08	187.66	300.72	307.85	1003.66	1185.21
09	160.38	247.25	268.75	297.39	205.79
10	292.02	420.82	419.08	490.06	448.85
11	306.98	330.16	391.30	399.07	475.71
12	238.17	333.52	327.29	319.85	319.21
13	205.24	273.85	311.16	263.63	232.68
18	186.96	213.06	198.79	263.47	267.86
19	143.62	189.70	189.51	205.82	173.54
ACC. BEN.	23.38				
TOTALS					
01	313.79	566.90	496.42	513.08	663.96
02	357.73	623.17	567.30	676.96	681.24
03	392.48	569.35	476.00	455.47	920.70
06	326.47	176.29	196.19	266.49	338.11
07	415.77	699.05	588.56	519.16	853.39
08	1346.16	1092.93	767.22	3054.81	2345.16
09	517.84	889.60	856.28	894.97	772.66
10	1098.23	1268.17	1217.81	1838.45	1556.15
11	835.76	1091.17	1211.80	1797.57	2025.16
12	747.27	1014.69	842.81	1386.01	1157.86
13	637.16	906.16	1352.57	938.14	1097.62
18	548.27	703.56	705.29	844.45	761.58
19	440.31	634.58	684.42	1174.51	664.18

FIGURE 8

Experience Classifications with Size ** and 1986 Loss Costs


GEOGRAPHY
FARMERS
($253.36:58,848)
TORONTO
(560:04:1,260,680)
ONTARIO
($442.06:4,018,116)
KENORA
($293.02:43,433)
REST OF CANADA
($278.50:4,648,018)
PLEASURE DRIVING
($313.79:1,278,442)
5 YEARS CLAIMS FREE
($386.89:2,709,452)
BUSINESS USE
($415.77:103,264)
URBAN*
($431.17:3,178,649)
SINGLE MALE (<20)
($2,025:994)
CANADA
($372.70:8,076,134)
NO YEARS CLAIMS FREE
($802.30:52,736)
MARRIED MALE (<20)
($2,345:805)
YOUNG FEMALE (<20)
$761.58:1,899)
RURAL
($320.73:1,522,609)

* All urban subdivisions are for private passenger cars excluding Quebec & farmers. All others include Quebec, but exclude farmers except where specified.

** Size is based on cars insured for bodily injury and property damage (third party liability).

same bad risk as the average for that class. In the same way, some pleasure drivers with five years claims-free driving experience have just been extraordinarily lucky and really represent poorer risks. However, without any other signalling mechanism to indicate that one under 18 year old male driver is different from another, all have to be lumped together. The class as a whole is very expensive to insure.

In Table 18 is the composition of the loss costs for under 18 year old single males with no claims-free driving and pleasure drivers over 25 with five years claims-free driving who drive less than 16,000 km. per year. Note that the frequency of claims is much higher for the under 18 year olds. Overall, almost one in four cars insured in class 10 have a claim each year for bodily injury and property damage and collision. Indeed, in 1984 half of all cars insured in class 100 had a collision claim. In contrast, in class 015 only one in twenty had a claim for liability (BIPD) and one in fourteen for collision. Obviously, under 18 year old single males are accident prone. Similarly, in 1986 the average claim cost in class 100 was $5,880 for liability (BIPD) and $1,505 for collision, whereas for class 015 drivers it was only $4,331 and $1,416 respectively. Hence, not only are under 18 year old single males accident prone, but they also have more expensive accidents.

TABLE 18

Composition of Loss Costs For Two Polar Classifications

Liability (BIPD)	Claims Frequency	Average Cost	Loss Cost/ Pure Premium
Class 100:	Under 18 years old, single males with no claims-free driving		
1984	0.2067	4,648	960.74
1985	0.2520	3,319	836.38
1986	0.2393	5,888	1407.10
Class 015:	Pleasure only, under 16,000 km., no under 25s		
1984	0.0523	3,388	177.19
1985	0.0541	3,790	205.04
1986	0.0497	4,331	215.20
Collision			
Class 100:			
1984	0.52	1,082	1250.00
1985	0.1687	1,463	370.63
1986	0.2034	1,505	445.24
Class 015:			
1984	0.0703	1,154	81.13
1985	0.0740	1,243	91.98
1986	0.0684	1,416	96.99

Collision includes all deductibles except $25 and $50.

C. U.S. Experience

In some of the Canadian classes there is insufficient data to be really confident that the loss costs reflect expected costs. In contrast, in the United States pooled data over 44 states for the most recent years (some ending December 1984, others June 1985) is available in Table 19. Note that this data is not comparable to Canadian data on an absolute basis, since it represents 'all coverages combined' where the individual coverages differ as well as their composition in the total. Moreover, the actual classifications also differ. However, within the overall level of rates the relative pure premiums are interesting.

TABLE 19

1985 U.S. Pure Premiums; All Coverages Combined

Classification	Territory I	Territory II
	$U.S.	
Unmarried Female 21-24, drive to work (8971)	306.35	426.43
Unmarried Male 21-24, drive to work (8821)	392.06	509.51
Married Male 21-24, drive to work (8421)	324.01	464.59
All Other Adults drive to work (8131)	222.42	289.56
Pleasure Only (8111)	193.39	298.21

Territory II includes major urban areas, such as Los Angeles, Philadelphia, Chicago, New York, etc.

Source: Circular, October 29, 1986: Insurance Services Office (U.S.).

Note that in both the low and high risk territories (less urban) unmarried males again have a higher loss cost than unmarried females in the 18-21 young driver class. This extra loss cost is around $85 or 20% of the unmarried females' loss cost. Similarly, unmarried 21-24 year old males now have an extra loss cost of $45.70 over their unmarried brethren or a premium of 10-20%. For all other adults (over 25) who are in the same 'drive to work' category the average loss cost is only U.S. $222.42-U.S.$289.56 depending on the territory, which gives an extra loss cost to the unmarried male of $170-$220 or about 76%. The lowest loss cost class is again the pleasure only driver.

U.S. data, which includes vastly more observations, thus supports the Canadian data that discrimination on the basis of age, sex and marital status does in fact produce a significant refinement in the estimation of expected loss costs per insured vehicle. As in Canada, data in the U.S. is also collected using additional geographical classifications due to the higher loss cost experience in more urban driving environments.

E. Setting Rates

Sections III(B) and (C) have dwelt at length with pure premiums or actual loss costs, since it is a fundamental tenet of insurance, as described in Section III(A), that better estimation of exposure means keener pricing. Moreover, this keener pricing in a competitive environment means that firms can survive. A company that charges average prices (premium rates) based on average risks will end up with bad risks, for which it is only charging average prices. Such a policy is a recipe for failure and it is hardly surprising that in a business as competitive as car insurance no private car insurer sets prices on such a basis.

The pure premium in Section III(B) enables insurers to examine the actual experience of claims frequency, settlement costs and pure premiums within different categories. This experience is important, but is not by itself a rating system. How any individual company sets rates is up to that company. Some may decide to use a multiplicative system, whereby surcharges are applied over a base rate based on a percentage, whereas others may charge a surcharge as a fixed amount.

Similarly, as a company finds that it is getting too much business in one area and not enough in another, it will impose an additional surcharge in the one area and offer a discount in another. As a result, although advisory services advise on rates using standardized formulas, actual rates charged vary, sometimes quite dramatically, from one company to another. As in all areas of a private enterprise economy, it pays for the consumer to shop around for bargain rates.

This paper will not show how a rate is determined because practice differs from company to company and in all cases it will involve judgment, both as to how future loss experience is likely to deviate from past experience and whether or not past experience actually measures past risk. In general, however, there are some key principles involved in setting rates:

- each class should be homogeneous, that is, each risk in a class should be as similar as possible;
- each rating criteria should contribute to identifying the expected loss;
- the rating structure should be complete, so that all risks can be assignable;
- each criteria should be clearly defined and verifiable;
- the process should be cheap to administer (i.e., cost effective); and
- the system should be capable of being evaluated, i.e., you have to know whether it's doing what it's supposed to do.

The categories used by the Insurance Bureau of Canada generally fulfill these criteria, since age, sex, marital status, geographic location and occupation (farmer or not) all represent clearly defined, identifying data that is cheap to collect and verify. Some may question driving habits, i.e., whether someone drives to work and if so how far, on the ground that individuals can lie and not be detected. However, by and large the existing rate structure meets the key principles just mentioned.

This is not to say that the existing rate structure is ideal. It may in fact be the case that the young male drivers that have accidents are 'immature' and a mature young driver should not be penalized as a result. The problem is that maturity cannot be measured or verified. It may be possible to solicit references that attest to maturity and impose restrictions on driving habits that might lead to a higher probability of accidents. However, the cost of verifying the references and enforcing some controls over driving, apart from leading to allegations of 'snooping', would be relatively expensive.

The ultimate request of those demanding the removal of the existing rate structure must be that they suggest an alternative structure that meets the key principles outlined above and achieves the same degree of risk refinement. In this regard it has to be noted that the new rating system proposed by the Insurance Bureau of Canada in its submission to the Osborne Commission as yet does not have any experience support. Unless legislation makes some of the previous rating classifications illegal, it will still be the case that a new company can undercut companies using the IBC rating classification in some categories. For example, a 40 year old male pleasure driver with no driving experience may still be a much better risk than an 18 year old in similar circumstances. Although the number of years of licence is obviously meant as a proxy for age it may not be a perfect proxy.

V. THE PUBLIC PLANS

A. Evaluation of Overall Performance

Evaluating the Insurance Corporation of British Columbia (ICBC), the Manitoba Public Insurance Corporation (MPIC) and Saskatchewan Government Insurance (SGI) would be easier if they provided the wealth of detail available for the private car insurance companies operating in the rest of Canada. Unfortunately, since they are not required to file information with the Federal Superintendent of Insurance and they do not provide statistical experience data to the Insurance Bureau of Canada, there is little comparable data available. All that is available is the sketchy data contained in their annual reports which, like most annual reports, consists mainly of a self-congratulatory commentary. Hence, in the analysis that follows, vital pieces of data that permit valid comparisons are missing.

Also, conceptually, the public plans cannot be evaluated on the same basis as private sector companies, since they do not operate under the same set of constraints. Even the public sector plans themselves are not identical with ICBC operating on quite similar lines to a private corporation and SGI-Autofund operating in a manner impossible for any private sector firm. A potted history of the three main public plans is at Appendix A and specific details will be developed as we proceed. However, an overview is provided in the loss costs in Table 20.

For the public plans the loss costs are simply the total claims costs inclusive of adjustment costs divided by the number of insured motor vehicles, except for Saskatchewan where, because of the absence of reported data, indirect estimates had to be made. These overall average costs are compared with the loss costs taken from the 1986 Green Book for passenger cars excluding farmers. Conceptually, these numbers cannot be compared, since within the overall classifications loss costs for private passenger cars will not equal overall vehicle loss costs. Moreover, the average built up from the Green Book, including BIPD, accident benefits and collision will not equal the average for the three public plans, since the basic coverage will differ. For example, the public plans usually cover all perils, not collision. However, given the available data this is the best that can be done.

TABLE 20

Loss Costs

	1986	1985	1984	1983
Saskatchewan	N/A	227.49	188.81	182.36
British Columbia	388.11	359.21	365.15	350.00
Manitoba	332.15	279.37	261.86	255.92
Urban	431.17	396.84	344.97	310.25
Rural	320.73	295.45	258.76	240.88
Ontario	443.32	414.31	361.95	315.36
Kenora	293.02	302.41	273.49	335.8
Toronto	560.04	511.35	448.44	388.62
Ontario Farmers	253.0	240.66	203.77	254.74

What is apparent from Table 20 is that the loss cost variability evident over different regions outside of the public plans is consistent with the variability within the plans. For example, Ontario farmers had a 1985 loss cost of $240.66; this is consistent with the level of loss costs for Saskatchewan in 1985, which was $227.99. Although coverage in Saskatchewan would also include non-farmers, overall it would be closest to Ontario farmers or the Canada-wide rural classification, which averages only about 35% more.

Similarly, the differences between Ontario and British Columbia are quite persistent but really not that large. Ontario, over the four years 1983-86, averages about 5% more than B.C. Given the regional differences in loss cost shown in Table 20, the differences that exist within Ontario, for example, between Kenora and Toronto, and the fact that the Ontario figure excludes the lower loss costs relevant for Ontario farmers, this 5% difference may not be meaningful. However, it should be pointed out that this premium of Ontario over B.C. is due mainly to the 1986 and 1985 experience, and the trend in loss costs between B.C. and Ontario over time seem to be different.

Overall, the loss costs in Table 13 indicate that if SGI, MPIC and ICBC reported these loss costs for private passenger cars excluding farmers, private car insurers would not be surprised. That is, even though the B.C. loss costs are lower than those in Ontario, and SGI's are about the same as those for Ontario farmers, this variation can be explained by the existing variation based on different regional and urban/rural mixes. The conclusion from this is that there is no strong evidence from the average loss cost per car insured that would indicate gross inefficiency, or conversely, tremendous efficiency on the part of the public insurance plans.

The loss cost data in Table 20 indicates that the primary cost for car insurance rates within a province, which is the average amount paid out on a claim inclusive of adjusting costs, can essentially be explained by the known pattern of regional variation based on urban/rural and farmer/non-farmer patterns. It does not, of course, indicate what the insurance companies charge for this coverage.

Table 21 gives claims ratios and expense ratios for the three public plans, the Ontario aggregate data up to 1985 and the results for five mainly auto insurers, with the specific company data in Table 22. The average claims ratio in the public sector was 95.9%, with SGI: 87.2%, MPIC: 99.5%, ICBC: 101%. Ontario's claims ratio averaged 90.1% with the five mainly auto insurers at 83.3%. Note that as shown in Figure 1, we would expect the Ontario claims ratio to be higher than the national average given the recent behaviour of the claims ratio for third party liability. This explains why the five national car insurers have a claims ratio below the Ontario average. Also note that, as expected, the claims ratios for the private sector firms are lower than those for the public sector plans because of the effect of the corporate income tax discussed in Chapter II.

The interpretation of the data is quite straightforward, as in the private sector all the public plans have experienced an increasing claims ratio, with ICBC being something of an anomaly having a claims ratio hovering around one, except for 1986. The higher level of the claims ratio for the public plans indicates that the previous data on actual loss costs understates the difference in average premium costs across the provinces. Average premium rates can be approximated by dividing the loss costs in Table 20 by the claims ratios in Table 21. The average premium levels are SGI: $228.63, MPIC: $274.76, ICBC: $361.7 and Ontario: $389.16, which excludes the 1986 results. Again these results are not surprising given previous data on regional, urban/rural, farmer/non-farmer

TABLE 21

Claims and Expense Ratios

	1986	1985	1984	1983	1982
SGI					
Claims Ratio	-	0.992	0.794	0.828	0.874
Expense Ratio	-	0.151	0.110	0.108	0.149
MPIC					
Claims Ratio	1.137	1.016	0.942	0.953	0.925
Expense Ratio	0.121	0.114	0.118	0.127	0.119
ICBC					
Claims Ratio	1.072	0.968	1.012	0.992	1.02
Expense Ratio	0.152	0.146	0.154	0.149	0.146
ONTARIO					
Claims Ratio	N/A	1.007	0.952	0.839	0.805
Expense Ratio	N/A	0.243	0.259	0.25	0.242
REPRESENTATIVE PRIVATE FIRMS*					
Claims Ratio	0.905	0.956	0.830	0.727	0.747
Expense Ratio	0.258	0.274	0.276	0.257	0.269

*As in Table 22.

TABLE 22

Representative Car Insurers

	1986	1985	1984	1983	1982
Allstate of Canada (70.0% Auto:$188.6M)					
Claims	1.022	.952	.831	.703	.716
Expense	.276	.295	.283	.280	.286
Home Insurance (84.1% Auto:$81.2M)					
Claims	0.872	0.924	0.841	0.771	0.763
Expense	0.301	0.286	0.299	0.306	0.292
Liberty Mutual (83% Auto:$83.5M)					
Claims	0.961	1.002	0.790	0.793	1.063
Expense	0.255	0.307	0.314	0.289	0.302
State Farm Auto (80% Auto:$217.0M)					
Claims	0.885	1.058	0.892	0.707	0.712
Expense	0.214	0.243	0.245	0.225	0.202
Pilot Insurance (74% Auto:$130.0M)					
Claims	0.754	0.786	0.747	0.724	0.638
Expense	0.284	0.268	0.281	0.278	0.323
Average*					
Claims	0.905	0.956	0.830	0.727	0.747
Expense	0.258	0.274	0.276	0.257	0.269

*Weighted by 1986 net premiums earned auto.

differences. Although, the difference between Ontario and ICBC is understated because of the lack of 1986 results for Ontario.

The other interesting data in Table 21 is the difference in expense ratios across the public and private plans. As discussed in Section IIc we would expect the private firms to have higher than average expense ratios because none are 100% car insurance companies and Table 6 has indicated that expense ratios are higher in other lines of insurance. Hence, their average expense ratio of 26.6% is predictably higher than the Ontario average. What requires further explanation is why ICBC's expense ratio averages 15%, SGI's 13% and MPIC's 12%. Taken at face value the expense ratios would seem to be at least 10% lower than the Ontario average.

However, before examining the expense ratio differences we should examine the overall results. We have already looked at loss costs and average premiums, what we now have to do is look at whether or not the underwriting area as a whole is sound in both the public and private sectors. This requires examining investment income.

Table 23 includes the same analysis of the public sector plans as Table 10 for the private companies. First, free liabilities as a percent of assets is calculated. Note here that all of the public plans have very high free liability ratios. This is the corollary of the absence of explicit equity capital, for example, ICBC operates with 'reserves' averaging only 4%, MPIC 14.1% and SGI 13.8%. The reserves ratios themselves are relatively meaningless so long as the provincial governments guarantee the plans, in the sense that they will inject capital should catastrophic losses be incurred. We will return to this later. Second is the insurance asset ratio, that is an estimate of the assets that can be specifically identified as belonging to the insurance operation rather than being straight investments. Third is the net free liability ratio which is the difference between the first two. Finally, the turnover ratio is divided into the net free liability ratio to get the net free liabilities per dollar of net premiums earned.

In comparing the public plans with the private sector in Table 8, note that the end result is very similar, except for ICBC. Both MPIC and SGI average around 90

TABLE 23

Investment Funds in Public Plans

	1986	1985	1984	1983	1982
A SGI - Autofund**					
Free Liability Ratio		84.1	77.5	87.1	96.9
Insurance Asset Ratio*		16.0	16.0	30.2	31.0
Net Free Liability Ratio		68.1	61.5	56.9	65.9
Turnover Ratio		0.668	0.705	0.732	0.768
Net Free Liability Per Dollar of Premium Earned		1.02	0.87	0.78	0.86
ICBC					
Free Liability Ratio	94.6	94.1	98.0	97.0	97.5
Insurance Asset Ratio*	7.1	8.5	10.4	13.1	14.0
Net Free Liability Ratio	87.5	85.6	87.6	83.9	83.5
Turnover Ratio	0.445	0.485	0.555	0.65	0.725
Net Free Liability Per Dollar of Premium Earned	1.96	1.76	1.58	1.29	1.15
MPIC					
Free Liability Ratio	98.1	82.6	81.8	83.1	83.8
Insurance Asset Ratio*	16.8	17.2	14.3	15.8	17.1
Net Free Liability Ratio	81.3	65.4	67.5	67.3	66.7
Turnover Ratio	0.714	0.693	0.758	0.826	0.917
Net Free Liability Per Dollar of Premium Earned	1.14	0.94	0.89	0.82	0.73

*Assume cash equals 2% of assets similar to the private plans in order to separate cash out from cash and short term securities.

**SGI prior to 1984.

cents in free liabilities per premium dollar, close to the all insurance average for Canadian companies of 101 cents. ICBC, on the other hand, averages 155 cents per premium dollar of net free liabilities, mainly as a result of a low turnover ratio, which is to say that for every premium dollar earned it has a relatively large amount of unpaid claims and unearned premium income. This could indicate slower payment patterns than SGI and MPIC, which benefits ICBC policyholders (who are not claimants) in having that money available to generate investment income.

The investment income is added to the claims and expense ratios in Table 24 to get the overall underwriting results. This is to be compared with the private sector results in Table 6, where again we would expect the overall results to fluctuate around zero, indicating competitive pricing overall. For the private car insurers the average ratio was -0.006 indicating that overall car insurance underwriting was marginally unprofitable, except that a dramatic deterioration was under way during 1984-85. For the public plans the ratios were MPIC -0.01, ICBC 0.017 and SGI 0.12.

What this data indicates is that both MPIC and ICBC essentially priced their policies accurately overall given their cost structure, but that SGI was unusually profitable. The reason for SGI's high level of profitability is the lack of such profitability in the past and the need to build up a reserve for future contingencies. In 1980 SGI included as a liability $72M owed to the Crown Investments Corporation of Saskatchewan (CIC), a liability that was non-interest bearing and repayable at the discretion of CIC. However, the balance in the Automobile Accident Insurance Act (AAIA) account was -$33.4M in 1980. Hence, car premiums had to be above their fair levels to replenish this past deficit. In 1981 the deficit was $22.5M, in 1982 $12.56M, in 1983 a surplus of $14.9M, in 1984 a surplus of $59.7M and in 1985 a surplus of $45.8M, but only after $19.9M had been returned to the policyholders as a bonus. Hence, from 1981-85, SGI in effect overcharged for car insurance because of a need to build up a contingency reserve. Such a pricing policy could not have survived in a competitive marketplace.

It is appropriate at this point to talk of the role of the provincial government guarantee. Essentially, in our model of Section IIb the insurance company consists of

TABLE 24

Underwriting Profitability in the Public Sector

	1986	1985	1984	1983	1982
SGI - Autofund					
Claims Ratio		0.992	0.794	0.828	0.874
Expense Ratio		0.151	0.110	0.108	0.149
Free Liability Ratio		1.019	0.872	0.77	0.858
Underwriting Profit/Loss		-0.03	0.22	0.16	0.100
ICBC - Autoplan					
Claims Ratio	1.072	0.968	1.012	0.992	1.02
Expense Ratio	0.152	0.146	0.154	0.149	0.146
Free Liability Ratio	1.96	1.76	1.58	1.29	1.15
Underwriting Profit/Loss	-0.037	0.082	0.035	0.004	0.00
MPIC - Autopac					
Claims Ratio	1.137	1.016	0.942	0.953	0.925
Expense Ratio	0.121	0.114	0.118	0.127	0.119
Free Liability Ratio	1.14	0.94	0.89	0.82	0.73
Underwriting Profit/Loss	-0.149	-0.026	0.053	0.012	0.061

insurance activities and associated investment activities with the link being that writing insurance generates net free liabilities that can be invested. For competitive firms, competition for premium income will effectively give policyholders lower premium rates in return for their effectively providing an interest-free loan to the insurance company prior to settling claims. Given that there is the risk of catastrophic losses from underwriting, private insurers are required to put up equity capital as security, with this equity capital also being invested. However, since the underwriting risk is unsystematic, i.e., random, without restricting investment, there is effectively no cost to having to put up this extra capital. In the same sense, as long as the provinces each guarantee the solvency of their plan and inject and then withdraw funds, as the plan is unprofitable and then profitable, there is no cost to this guarantee.

The above argument is equally valid if the province injects equity capital that remains with the car insurance division. That is, if it adds equity to act as a cushion similar to a private corporation. In this case, the province is entitled to a fair return on its equity capital either through dividends or allowing value to be enhanced by reinvestment. If the equity capital is regularly destroyed, forcing further injections of capital, then this obviously represents a subsidy. Analysis of the recent financial statements does not indicate regular infusions of capital into the public plans, that would warrant an accusation of subsidy.

However, the financial statements do indicate political intrusion. MPIC clearly should have raised its premium rates in 1986 as it effectively lost 14.9 cents on every net premium dollar earned. The rates for SGI from 1981 indicate higher-than-needed rates to compensate for past pricing mistakes. Similarly, ICBC had to have an infusion of capital in 1976 to avoid raising rates and violating political promises. In all cases, there is clear political intervention and rate manipulation that would not have existed in a competitive market. However, these 'on-off' instances of political intervention do not negate the conclusions of Table 17 that car insurance policies written by MPIC and ICBC overall have been as competitively priced as those by private insurers.

B. Expense Ratios

In Table 25 there is a more detailed description of the expense ratios for the three public plans which should be compared to the Ontario data in Table 4. First, as previously noted, how some of these costs are allocated is intrinsically arbitrary, since they are common costs. That is, the senior management in SGI, for example, deals with both the general insurance lines and the Autofund, so any precise allocation of their cost must be arbitrary. This is noticeable in the change in SGI expenses from 1982-3 where the Autofund's administration expense ratio dropped by 4.7% as a result of a change in the method of cost allocation. Conversely, as we will see, the administration expense ratio for SGI's general insurance lines jumped by 5.9% between 1982-3. As a result, the expense ratio for MPIC and SGI are suspect, since neither are independent operations.

TABLE 25

Expense Ratios

	1986	1985	1984	1983	1982
ICBC					
Claims Adjusting Ratio	9.3	8.7	8.8	9.1	9.5
Administration	7.8	7.8	8.8	8.8	8.4
Commissions	7.5	6.8	6.7	5.9	6.2
Totals	24,6	23.3	24.3	23.8	24.1
MPIC					
Claims Adjusting Ratio	11.8	10.8	10.5	10.3	9.9
Administration	4.3	3.6	4.2	4.9	4.4
Commissions	4.7	4.7	4.5	4.8	4.9
Premium Taxes	3.0	3.0	3.0	3.0	2.7
Totals	23.8	22.1	22.4	23.0	21.9
SGI*					
Claims Adjusting Ratio	8.5	8.5	8.5	8.5	8.5
Administration	7.6	9.8	6.2	6.3	11.0
Commissions	0.9	1.2	0.8	0.9	0.8
Premium Taxes	4.0	4.0	4.0	3.3	3.0
Totals	21,0	23.5	19.5	19.3	23.3

*1986 estimates from AAIA Rate Application, September 1984, as are the claims adjusting ratio estimates.

There are several observations from the data in Table 25. First, the claims adjusting ratios vary between 8.5 and 11.8%, a range which brackets the Ontario claims adjusting ratio of 11.2%. However, the average for the three plans are ICBC 9.1%, MPIC 10.7% and SGI 8.5% which are all below that of Ontario. However, whether the differences are meaningful or not is questionable. SGI does not break out its claims adjusting ratio in its annual report. The author only became aware of this deviation from industry practice by examining SGI's rate application for 1985, where actual claims costs and claims adjusting expenses were broken out for budgeting purposes. From this it is clear that SGI's adjusting expense ratio for automobile insurance is at least 8.5%.

The understatement of SGI's expense ratio does not affect our previous analysis of loss costs and average premium levels; however, from that analysis it became clear that SGI had been over-charging for car insurance to build up contingency reserves. As such, all of its expense ratios are smaller than they would be had SGI been pricing competitively. Hence, the 8.5% is an understatement of SGI's true claims adjusting expense ratio. From this it would appear that the public plans have expense ratios of around 10% and are slightly lower than the Ontario average of 11.2%. Actual claims adjusting expenses could, however, be identical in view of the 1.3% allocation of corporate overhead included in the Ontario average.

The second expense item is administration expenses. The Ontario average here is 6.8% if we divide general expenses between claims settlement and processing costs of 6.8% and agency acquisition costs of 17.5%. Alternatively, we can divide expenses into commissions costs of 11.5% and other net of tax costs of 9.4%. If we use this latter division, administration costs in Ontario are clearly higher than the averages for ICBC of 8.3%, MPIC of 4.3% and SGI of 8.2%. Moreover, the SGI estimate includes the 1985 costs for administering the driver and vehicle licensing system that it took over from the Highway Traffic Board. Hence, we have to conclude that administration expenses are higher in the private sector. Why this should be the case will be discussed in part C of this section.

The third part of the expense ratio is the commission cost paid to the agent generating the policy. Here, the

Ontario average of 11.5% is well above the averages of the public plans of ICBC 6.6%, MPIC 4.7% and SGI 0.91%. However, note that not only is the Ontario average higher, but also there is a wide discrepancy in the commission expense ratio for the three other public plans, with SGI's ratio being almost nothing and MPIC and ICBC somewhere in between. Clearly, there is something determining the commission expense ratio that needs to be analyzed. This too will be taken up in part C.

The last item in the expense ratio is premium taxes, licences and fees. For Ontario, this averaged 3.4% including 3% for premium taxes and 0.4% for licences, fees and allocations to the Federal Superintendent of Insurance, etc. For the public plans SGI's average was 4.0%, MPIC's 3.0% and ICBC's was 0%, since prior to 1986 ICBC did not pay any premium taxes. Since these costs are mandatory and cannot be eliminated it makes sense to only examine total expense ratios after excluding them. In this case total expenses for 1986 become: Ontario 32.1%, ICBC 24.6%, MPIC 20.8% and SGI 17.0%. However, remembering that SGI's expense ratio is understated, Ontario's expenses seem to exceed those of the public plans by between 7.5% and say 13%, mainly as a result of lower commission and general administration expenses. This would amount to between $29 and $50 per car based on an estimate of average 1985 premium levels. There is reason to believe that these numbers may overestimate the expense savings, mainly because the public plans do not seem to pay the $5 fee charged Ontario firms for accessing provincial driving records. Also, many suspect that SGI and MPIC do not pay competitive rates for other services from the provincial civil service. However, costing these benefits is impossible.

Before examining reasons why the Ontario expense ratio is higher than for the public plan, it is interesting to analyze the public plan's performances in non-auto insurance. Table 25 gives the expense ratios for ICBC, SGI and MPIC for general insurance. ICBC sold its general insurance division to the Cumis Group in February 1985. Hence, ICBC's results are only for 1982-4.

There are two striking features to the expense ratios in Table 26. First, they are dramatically different from the same companies' auto expense ratios. MPIC, for example, averages a total expense ratio of 47%, twice its auto

TABLE 26

Public Plans General Insurance Results

	1986	1985	1984	1983	1982
MPIC					
Claims Adjusting Ratio	5.0	5.9	4.1	4.1	4.3
Administration Ratio	18.0	19.8	15.5	14.8	16.3
Commissions	18.3	19.7	20.7	24.9	24.9
Premium Taxes	4.6	4.7	5.1	2.9	2.2
Total	45.9	50.1	43.4	46.7	47.7
SGI					
Claims Adjusting*	N/A	N/A	N/A	N/A	N/A
Administration Ratio	N/A	15.9	16.9	17.7	11.0
Commissions	N/A	19.4	19.1	18.7	19.0
Premium Taxes	N/A	4.3	4.6	3.9	3.3
Total		39.6	40.6	40.3	34.1
ICBC					
Claims Adjusting*			N/A	N/A	N/A
Administration			19.0	19.8	21.0
Commissions			22.5	21.7	18.9
Premium Taxes			3.2	3.2	3.2
Total			44.7	44.7	43.1

*Not broken out included with claims costs.

expense ratio. Moreover, its former strengths in having low administration and commission ratios disappear as these ratios are both over 18%. This is not an isolated incident, since both SGI and ICBC, before being sold, had total expense ratios that must have exceeded 40%, since without including adjusting expenses SGI's averaged 39% and ICBC's 44.2%.

Second, the public plan's expense ratios compare very unfavourably with the private companies' non-auto expense ratios in Table 3. For 1985, private companies averaged a total expense ratio of 36.8% for personal lines, 39% for property and 32.1% for other lines, all excluding claims adjusting expenses so as to be comparable with the data for ICBC and SGI. It may be argued that ICBC and MPIC are not comparable with 'average' private firms because they both concentrated on reinsurance. This may be true, but SGI is a broad-based property and casualty insurer and its expense ratio does not seem to be better than those of private insurers.

The lesson from examining the public plan's general insurance expense ratios is that they have not found some secret weapon that allows them to outcompete competitive private insurance companies. When public plans compete on the same basis as private companies they either fail, as ICBC did, have severe problems as MPIC had in 1985, or they look very similar to private companies as SGI does. The 'superior' performance of the public plans in lowering their auto expense ratios must not therefore be due to any superior business/management skills possessed by MPIC, ICBC and SGI, but must be due instead either to some systemic factors that produce lower expense ratios in a public monopoly, or to implicit subsidies available to them by being integrated into the respective provincial civil services.

C. Public Plans' Rating Practices

Each public plan has a different method for setting premiums. In this section we will briefly discuss each plan; a more extensive discussion is at Appendix B to this section.

(i) SGI - Autofund

SGI charges a premium based on three elements. First, there is a premium charged to cover third party liability of $79 and to cover accident benefits of $17. Second, there is a premium charged to cover all perils damage to the insured car which varies according to the value of the car. SGI provides a booklet outlining both of these fees, so that insurance costs are immediately known as soon as the vehicle registration is surrendered. For example, a 1987 Mercury Sable costs $400 to insure, a 1980 Honda Accord $245 and a 1974 Austin Marina $175. Finally, surcharges are based on the individual's at fault accident history and driving record over the past three years; each accident costs $50 and each driving infraction adds rating units with surcharges being a function of the number of rating units.

An individual suspended for 6-12 months in the past three years would have a surcharge of $135, since this infraction is worth 16 rating units. If the individual also had three accidents over the three years, then this would add another $150. If the individual decided to drive a 1987 Jaguar XJS rated at $670 then the total insurance premium would be $915. The individual driving the 1974 Austin Marina with a clean driving record and no accidents would pay the basic $175.

SGI removed the $15 driver's insurance premium in 1985, when it took over the administration of the driver and vehicle licensing system. SGI has not received any subsidy from gasoline taxes since 1982. In 1985 SGI also introduced a 10% discount on rates for farmers.

(ii) MPIC - Autopac

MPIC-Autopac operates on similar lines to SGI's Autofund. A premium is again charged according to the type of car with surcharges based on accident and driving history. Demerit points are given for driving infractions and each demerit point over 6 adds a surcharge of $25. Conversely, merit points are accrued at a rate of two per year up to a maximum of five for each year without an infraction or accident. Similarly, drivers who are held 50% liable for two or more accidents in any twelve-month period are assessed a surcharge of $100 with each additional accident adding $200. Only in 1986 did MPIC remove age, sex and marital status as a basis for setting insurance premiums. Unlike SGI, MPIC still charges a common driver's insurance premium of $15 on the grounds that "it is usually the driver who causes accidents to happen."

Like SGI, MPIC's coverage includes third party liability, no-fault accident benefits and compulsory all perils coverage on the car. There is also the ability to buy extension coverage to increase third party liability beyond $200,000, reduce the $200 deductible on all perils and insure against an under-insured motorist.

(iii) ICBC - Autoplan

ICBC's Autoplan is by far the most complicated of the three public plans. The compulsory coverage includes third party liability up to $200,000, no-fault accident benefits and damage caused by an uninsured or unidentified motorist (hit-and-run). Unlike SGI and MPIC, it does not include damage coverage to the car, i.e., all perils, comprehensive or collision. This latter coverage along with under-insured motorist protection and extending the third party liability limit is available on an option.

The rating structure is also unlike that of SGI and MPIC, since it includes many of the variables used by private sector insurers. The premium is determined by five basic factors:

- Purpose of use: which includes four basic categories -- pleasure only; pleasure and drive to work; business; and seniors pleasure driving only.

- Territory: seven regional divisions within B.C.

- Value and age of the vehicle: for example, rate group 3 includes 1979 Pinto, 1978 Cutlass Supreme and 1975 Toyota Landcruiser.

- The claim record of the owner with a 10% discount for each claim-free year up to a maximum of 40% and a 30% surcharge for each claim. In all circumstances the premium returns to its base level after three claims-free years of driving and the insured always has the option of paying the claim privately and not taking the surcharge.

- A driver insurance premium based on the individual's driving record.

In evaluating the three public plans, it is apparent that ICBC is midway between the public plans of MPIC and SGI and the private sector plans. This is important since in Table 25, ICBC's expense ratio was much higher than that of MPIC or SGI. The reason for these discrepancies now becomes clear. The public plans achieve economies not because of their size, but because of the simplicity of their rating structure. The more sophisticated the rating structure the more paper work required to evaluate a driver and the more analysis required in setting rates.

As a result, the simple plans of SGI and MPIC that enforce massive subsidization of bad risks by good risks have low expenses. The private plans that for competitive reasons have to refine risks because otherwise they would get 'bad' risks for average rates, of necessity have higher expense ratios. ICBC seems to operate midway between the two by maintaining moderate cross-subsidization and operating a quite complicated rating structure.

With this framework, it now becomes clear that the higher expense ratios in the private sector are not indicative of inefficiency, nor are they indicative of economies of scale. The higher expense ratios in the private sector are indicative of a competitive reaction to refine the rate structure and price policies as accurately as possible, to estimate the true cost of coverage. It is for this reason that administrative costs are higher for the private insurance company, since they reflect the administration of a more sophisticated rating structure. Commission expenses are higher at the broker level because of the more time-consuming job of evaluating individuals and shopping the market.

It is quite clear that a public monopoly can operate insurance more cheaply by removing freedom of choice and enforcing cross-subsidization. At an extreme level, the federal government could create one insurance company with compulsory third party liability, accident benefits and all perils coverage. This coverage would cost the same for everybody regardless of age, sex, marital status, region of the country, driving and accident record, value of the insured car or whether or not the driver was a farmer. This policy would have almost no expenses to administer, since the fee could be paid with the driver's licence and the 'policy' could be available at any vehicle registration or post office.

Such a plan could still have fault or no-fault, so there would be little direct impact on claims costs, but the expense ratio would fall dramatically, since there would be little administration costs and no commissions to pay. Such a plan could not be introduced by private firms unless, legally, insurance companies were prohibited from any rate classification at all. Even in this case, a company, by restricting its geographical coverage, would implicitly discriminate with the result that Toronto would have no companies or brokers offering insurance!

It is thus apparent that the expense ratio is not indicative of efficiency, but instead is indicative only of the government's restriction of choice and mandatory cross-subsidization. It is equivalent to looking at design costs as a measure of efficiency when comparing a private car company and a nationalized car company producing one model, available in any colour as long as it's black. Obviously, the cost of producing a car or any other consumer product would also be reduced in the face of a similar massive reduction in choice.

With these comments in mind the survey of auto premiums undertaken by the Toronto Star in Table 27 becomes understandable. First, it is obvious that high risk groups will find coverage cheaper in the public plans, since they are being subsidized by the low risk groups. In Table 27 the 22 year old female driving to work in Toronto with a clean driving record pays an average $763.50, and the equivalent male $1,321.83 or 73% more. This is basically the same as the all-Canada loss costs for BIPD, accident benefits and collision in Table 11, where the male had a 69.7% surcharge over the equivalent female. Obviously these rates are higher than the ICBC rates, which subsidize their high risk groups.

For the even higher risk category, the 22 year old who has already been at fault in an accident, the private premium averages $3,376, or a whopping 817% more than the same person insured through ICBC. The reason of course is

TABLE 27

Relative Car Insurance Premiums

Company	Toronto	Vancouver	Use
Allstate	498		
Wawanesa	553		Age: 43
Royal	571		Claims-Free: 6 years
State Farm	647		Drives to work
Co-Operators	650		1978 Phoenix
Economical	674		
ICBC		529	
Royal	4,191		
Co-Operators	4,066		Age: 22 male
Wawanesa	3,600		Pleasure use
Economical	3,473		One at fault accident
State Farm	1,554		1979 Volare Wagon
ICBC		413	"mother's" car
Royal	1,122 (666)		
State Farm	1,192 (742)		Age: 22 male
Economical	1,218 (778)		Claims-free: 6 years
Wawanesa	1,260 (782)		Drives to work
Co-Operators	1,278 (792)		1979 Volare Wagon
Allstate	1,861 (821)		(brackets are for female)
ICBC		529	

Overall Coverage: 1,000,000 liability, collision with $250 deductible, comprehensive $50 deductible, and underinsured motorist protection.

Source: Toronto Star (April 12, 1987).

that because of the individual's age, sex and accident history he has signalled that he belongs to an expensive class to insure. Hence, the level of subsidization in the ICBC rates is even higher.

The final group is the 43 year old male with six years claims-free driving experience who drives to work. Here the picture is different; the average private sector premium is $598 or $70 more than ICBC. Whether this is a reasonable premium or not depends on whether loss costs in Toronto for this class are higher than in Vancouver. Given the substantial regional variability the difference may not be significant. Moreover, as always in a private sector insurance market, some insurers are signalling their unwillingness to insure this risk by charging higher prices. The premiums charged by Economical, Co-Operators and State Farm average $159 more than for Allstate. If the individual shopped around, he would have found a private sector rate $31 cheaper than ICBC.

This game of premium comparison has become popular, but given the substantial variability in premiums charged for the same risk in the private sector and the obvious cross-subsidization evident in the public plans, it is also a meaningless exercise.

What is of more interest is whether the private sector premiums charged in Table 27 are out of line with the underlying expected cost of insuring this risk. Although, the author is not an expert in setting insurance rates, a rough estimate of appropriate rates is provided in Table 28. The rates are found for bodily injury, collision, comprehensive and accident benefits from the loss costs taken from the 1986 Green Book. The average loss costs for the four classifications that seem to correspond closest to the Toronto Star's descriptions for Canada as a whole were then revalued to reflect the Toronto 'surcharge', since liability and collision loss costs exceed the Canada-wide averages by 44.6% and 27.5% respectively. Comprehensive and accident benefit loss costs are not available by class so values were estimated based on the Toronto loss costs and the loss cost differentials of each of the individual classes.

TABLE 28

1986 Premium Estimates

	Classes				
	025	120	125	195	Toronto
BIPD	337.1	1179.3	702.6	395.3	372.5
Collision	129.2	407.1	303.7	183.2	141.5
Comprehensive*	42.3	140.6	93.8	54.2	46.1
Accident Benefits*	41.9	139.1	92.9	54.2	46.1
1986 Loss Cost	550.5	1866.1	1193.0	687.5	606.6
"Premium"	632.7	2144.0	1371.0	790.2	
Differential	1	+239%	+127%	+25%	
Star Average Premium	598.8	3376.8	1321.8	763.5	
	1	+464%	+121%	+27%	

*Estimates based on Toronto and class surcharges.

A premium was then calculated based on the formula,

$$\text{loss cost} + 0.25P - 0.12P = P$$

where 0.25 is the expense ratio and 12% is the contribution of investment income. The above formula ensures that premiums cover all costs and account for the contribution of investment income. The result is the rough premium of $632.7 for the 43 year old with 6 years claims-free driving, $2,144 for the 22 year old male with a recent accident, $1,371 for the claims-free 22 year old male and $790.2 for the claims-free 22 year old female.

These premiums can only be generally compared with the premiums quoted in the Star because the Star's quotes were for $1M of third party liability, whereas the loss costs in the Green Book are for $200,000 of average. This underestimate of the liability loss cost has its greatest impact on the 22 year old male driver who has had an accident, since the expected loss cost for liability for this individual is by far the greatest. The estimated premiums are slightly higher than the Star's average premium, but in all cases would be indistinguishable from an actual quotation by another insurance company. Moreover, the differential premiums for the 22 year old male and female without an accident are almost the same for the estimates as for the average premiums obtained by the *Star*. All this seems to indicate that the *Star*'s quotes seem to be eminently sensible and in line with the current costs associated with the coverages.

VI. CONCLUSIONS

It would be very easy to analyze each public plan in detail and report on the introduction of 'innovations', such as "dial a claim" or centralized claim centres or the differences in coverage. However, such an exercise merely confuses the issue. Some of the claimed advantages and disadvantages and coverage comparisons are included as an appendix. However, the key features that should be analyzed are those of efficiency.

In this paper we have found that the private sector plans are efficient, given the constraints under which they operate, and that there are no economies of scale in the car insurance business. This does not mean that car insurance premiums could not be lowered overall. It would be perfectly possible to lower claims costs by the following systemic measures:

(a) No-fault insurance. Although this paper cannot get into the pros and cons of no-fault, it is quite clear that legal costs are included as part of claims costs. Hence, by their removal, claims costs must fall. The car insurance companies seem to be efficient given the current tort system. If no-fault insurance cuts legal costs, then competition would ensure that these gains are passed on to consumers.

(b) Restrictions on awards. The introduction of non-negotiable awards for bodily injury would also reduce claims costs. In the same way worker's compensation has reduced costs by awarding statutory benefits.

(c) Restrictions on damage costs. The enforcement of higher deductibles, the use of second hand parts in car repairs (as practised and sanctioned by ICBC) and a take-it-or-leave-it estimate from a government adjustor could all potentially lower claims costs.

(d) Restricting the right to drive. Clearly, under-18 year olds have more accidents, which are also more expensive. Overall insurance premiums would come down if the driving age were raised and if individuals with repeat offenses suffered automatic suspension of driving privileges. The choice of an age when driving is permitted is arbitrary, weighing the rights of an individual to drive against the rights of society to protect itself from bad drivers. If individuals are not forced to reimburse society for the expected cost of their driving experience, then it might be better to ban them completely.

It would also be possible to lower expenses by simplifying the rate structure and enforcing mandatory cross-subsidization. This would involve:

(a) the elimination of commissions, since there would be no need to shop the market or explain complicated policies to applicants;

(b) the reduction of administration costs, since there would be no need to devise sophisticated rating structures;

(c) tying insurance to driver's licences or plates, thus reducing the paperwork involved.

Individual private corporations cannot do any of this, since it would be a recipe for business failure.

The Government would only want to do this if it is possible to reduce overall costs so much in a public plan, that the extra costs paid by low risk groups due to cross-subsidization are offset by the overall savings in commissions and administration. This question is addressed by Table 29 where estimated premiums are built up for Ontario as a whole for the major rate classifications. The procedure is the same as was used for Table 22. Loss costs are used for Canada-wide data from the Green Book and then an overall policy consisting of BIPD, collision, comprehensive and accident benefit, was created by grossing-up for the Ontario surcharge over the Canada-wide loss costs.

For Ontario as a whole, the policy would have 'cost' \$561.3 using a 25% expense ratio and 12% for investment income. If through public ownership overall expense costs were reduced to 19% in line with those of ICBC, then the overall premium would fall to \$525.09, a saving of \$36.21. Further, if everyone was charged the same rate of \$525.09 regardless of driving record and the previous rate class, then rates would change as indicated in Table 29.

Overall, the savings are not great enough to allow everyone to benefit from a drop in insurance rates. In particular, class 01 with about 43.4% of the Ontario driving population (by BIPD weights) would see premiums increase by almost $55 or 11.6%. Note that class 06 is an anomaly, since this is for an occasional driver under 25 for pleasure only, but the principal operator insures the car under either class 01, 02, 03, 04 or 17. For all other classes premiums would fall including class 02, the second most populous group with 33.8% of the driving population. However, for this group the savings is only about 4%, which, given the estimation problems, is probably not significant. For the really small classes, such as young drivers, the cost savings are dramatic, indicating that a small cross-subsidy by a large number of drivers can dramatically help the few paying very high premium levels.

TABLE 29

Ontario-Wide Rate Classes

Class	Estimated Premium	% in* Class	Gain/Loss
01	470.5	43.43	-54.59
02	548.5	33.86	23.41
03	598.2	6.39	73.41
07	647.8	3.64	122.71
06	317.6	3.35	-207.49
08	1828.4	0.06	1303.31
09	1079.0	1.17	553.91
18	999.4	0.96	474.31
19	726.5	3.0	201.41
10	1920.7	0.29	1395.61
11	1668.9	0.73	1143.81
12	1255.8	1.48	730.71
13	1044.7	1.66	519.61

Overall average $561.3
Public rate $525.09

*From BIPD loss cost data.

Private passenger cars, excluding farmers.

The results in Table 29 are suggestive only, since the premiums were built up from 1986 loss costs and may not reflect actual premium levels. It is also to be expected that as premium levels for the high risk groups come down, more drivers in these categories will drive. The result will be a deterioration in the average quality of drivers in Ontario, as more younger drivers decide to get Camaros immediately, rather than driving their parents' Dodge Aries until they have built up a reasonable claims-free period. In this case, the estimates in Table 29 are too high, since the average premium will rise.

The focus in this paper has been on the allocation of savings from lowering commissions and administrative expenses. Further savings may come from limiting lawyers' fees through no-fault or claimant's reimbursements through fixed compensation schedules. However, it is the opinion of this author that forcing the bulk of the Ontario population who are over 25, who have never had a claim and do not use their cars for business purposes, to subsidize the minority that cause a disproportionately larger share of the expensive accidents is counterproductive and economically inefficient, since it will just encourage more of the bad risks to drive. It also seems strange, to say the least, that farmers in rural areas of Ontario should subsidize 19 year olds in Toronto so that they can drive Firebirds and Camaros. A final reminder is that the age and marital status grouping is essentially a generational subsidy, since unmarried young males usually become old married males. The sex discrimination is a separate question and it seems strange to discriminate against females by charging a higher rate than the group warrants.

APPENDIX A: THE HISTORY OF PUBLIC INSURANCE PLANS

Saskatchewan (SGIO)

The Saskatchewan Government Insurance Office (SGIO) was established in 1944 in response to complaints of poor private sector coverage of rural markets. Although SGIO initially competed openly with private insurers, the implementation of compulsory basic no-fault auto insurance in 1946 included a provision giving SGIO exclusive rights to the compulsory portion of the auto insurance market. The compulsory basic policy now includes third party liability ($200,000 minimum), accident benefits and all perils vehicle coverage ($500 deductible). The extension coverage market remains open to competition, although the one-stop conveniences advantage of SGIO allows them to dominate this market.

Manitoba (MPIC)

Prior to 1970, Manitoba suffered from a serious problem of uninsured automobiles. It was concluded that compulsory basic coverage was needed and that the best way to administer such a plan was to create a monopolistic Crown Corporation, the Manitoba Public Insurance Corporation (MPIC). The coverage, called Autopac, includes compulsory accident benefits, third party liability $200,000 minimum), and all perils vehicle coverage ($200 deductible). MPIC also dominates the extension coverage market and competes with private companies in other types of insurance.

British Columbia (ICBC)

In 1968, a Royal Commission in B.C. criticized the practices of the private auto insurance industry for providing poor service, being unresponsive to their customers' concerns, operating inefficiently and being overly selective in the risks they chose. After third party and accident benefits coverages became mandatory in 1970, the problem of availability became more severe and in 1973 the Insurance Corporation of British Columbia (ICBC) was established and given exclusive rights to the entire auto insurance market. In 1976, private insurers were allowed to re-enter the market for voluntary extension coverage of vehicle damage, but ICBC continues to write virtually all automobile insurance policies. While both third party liability and accident benefits coverage remain compulsory, B.C.'s plan differs from those in Manitoba and Saskatchewan in that collision coverage is optional in B.C.

APPENDIX B: RATE-SETTING METHODS AND CRITERIA

Saskatchewan

Saskatchewan's Autofund rating system is broken into two components: vehicle insurance premiums and driver licence premiums.

Vehicle insurance premiums are intended to reflect the variability of insurance costs for different automobiles. Both the average repair cost and the frequency of accidents of a given vehicle are considered in assigning damageability ratings and premiums are then paid based on those ratings. Premiums for most new cars are between $300 and $500 with none over $660 (1985 rates).

Driver licence premiums are used to penalize drivers with poor driving records based on the fact that these drivers are more likely to be involved in accidents. Rating points are assessed for various traffic offences (for example, excessive noise is 1 point, following too closely is 2 points, racing is 4 points, etc.). Premiums are then charged on the basis of how many rating points a driver has accumulated, as shown below.

Class - Rating Units	Basic Premium
A - 3 or fewer	$ 0
B - 4 or 5	$ 25
C - 6 or 7	$ 35
D - 8 or 9	$ 55
E - 10 or 11	$ 75
F - 12 or 13	$ 95
G - 14 or 15	$115
H - 16 or 17	$135
I - 18 or 19	$155
K - 20 or 21	$175
M - 22 or more - $175 plus $30 for each point over 21.	

This scale punishes habitually reckless drivers, while holding back punishment until a driver has a substantial record of poor driving.

Driver licence premiums are also assessed against drivers who have histories of at-fault (50% or more) accidents in which Autofund paid $105 or more. Each such accident within the previous three-year period results in a $50 premium against the driver. A major complaint against this premium assessment is that fault is not vigorously investigated and there is a tendency to assign 50% fault to each driver in a two-car collision, thereby costing each driver $50.

Manitoba

Manitoba's Autopac plan is very similar to that of Saskatchewan, with some subtle but important differences. These changes are used to maintain simplicity and avoid any discriminatory labelling of driver groups.

Vehicle premiums in Manitoba are based on the value and principal use of the vehicle only, so that a person is not penalized by the fact that other drivers of the same model automobile may be more prone to accidents. The use of automobile values rather than repair costs does not have much effect on premiums, but it does simplify the system by replacing a statistical exercise with the simple book of car prices. The inclusion of principal use also helps to raise the contribution from commercial and business vehicles which are more prone to accidents because they are on the road more.

Manitoba's driver licence premiums are also slightly different from Saskatchewan's. While it works the same way as Autofund, Autopac emphasizes the driver premiums more heavily, shows more compassion for marginal drivers and punishes bad drivers more heavily. The assessment schedule, as shown below, jumps from no penalty to $150, thereby distinguishing very sharply between what are considered good and bad drivers.

Demerit Points	Premium Assessment	Demerit Points	Premium Assessment
0-5	$ 0	13	$287
6	$150	14	$312
7	$162	15	$337
8	$175	16	$362
9	$187	17	$387
10	$212	18	$412
11	$237	19	$437
12	$262	20	$462
		21 and over	$490

In the case of previous accidents, only accidents within the previous 12 months are considered and there is no charge for the first accident each year. Subsequent accidents, however, result in hefty charges of $150 each.

British Columbia

British Columbia's Autoplan uses a more complicated system for applying premiums, more closely resembling private sector methods. Five factors are considered in setting premiums:

- value and age of the automobile (Rate Group)
- the territory where it is principally operated
- the purpose for which it is used (Rate Class)
- the cost of prior years' claims under each rate
- class
- the claims record of the owner and/or driver.

The first four factors determine the base rate premium and then the fifth factor is used to apply a discount or premium.

The size of the discount or surcharge is determined using a claims-rated scale. New drivers enter at the base rate and can move down (discount) one level for each claim-free year (maximum 4 levels or 40% off). Conversely each third party liability or collision claim paid results, in an upward (surcharge) move of three levels (no limit). The claim-rating scale is shown below.

etc.	etc.	
+ 12	+250%	
+ 11	+225%	
+ 10	+200%	
+ 9	+150%	
+ 8	+125%	
+ 7	+100%	
+ 6	+ 75%	
+ 5	+ 60%	SURCHARGE
+ 4	+ 45%	
+ 3	+ 30%	
+ 2	+ 20%	
+ 1	+ 10%	

BASE RATE

- 1	- 10%	
- 2	- 20%	DISCOUNT
- 3	- 30%	
- 4	- 40%	

The long-lasting effects of a claim often justify paying minor claims yourself and using insurance only as security against the financial hardship that would be caused by a major accident. After all, that is the motivation for insurance in the first place.

This system is similar to those used by private industry in that it groups people based on what are considered important factors and then uses statistical methods to try to predict future claims to the group as a whole. Once that is done, individual records are used to fine tune each premium assessment.

APPENDIX C: ARGUMENTS FOR AND AGAINST PUBLIC OWNERSHIP

FOR	AGAINST
Premiums	
Reduced premiums due to investment income and operating efficiencies (see below).	Lower premiums are an illusion clouded by hidden revenues (such as gas tax) and subsidies (see below). Investment income also directly lowers private insurance premiums and potential efficiencies are negated by unions and the waste inherent in the public sector.
Efficiency	
Improved efficiency in terms of the fraction of premiums returned as claims as a result of: - non-adversarial system saves on legal and negotiating costs - restructured claims and settlement procedures which streamline claims and simplify systems for paying repair shops - reduced delivery costs - economies of scale	The use of Intercompany Settlement Charts by private insurers already restricts the use of courts for collision cases to those in which doubt exists as to fault. Gradual decrease in efficiency due to union labor costs, poor incentive structure and the absence of a bottom line. Increased visibility and public scrutiny create the need for more documentation and internal checks and balances for decisions.
Fairness	
More equitable and fair compensation system	Oversimplification of rating system is unfair.

because it avoids unpredictable courts. Rates are set based on individual driving records so that unfair age and sex discrimination is avoided.	Unfair to safe drivers because poor drivers would be susidized too much and incentives lessened. Tendency to oversimplify adjusting decisions by arbitrarily assessing equal fault in order to streamline operations.
Hidden Subsidies	
ICBC subsidizes other government departments through: - discounts to seniors and disabled - hospital plan contributions - free use of ICBC computers	Public plans are subsidized by: - paying no premium or corporate taxes - free access to police records - maintaining no loss reserves
Availability and Affordability	
No residual market	Residual market is adequately served by the Facility Association. Availability of other types of insurance may suffer if some private insurers leave.
Ability to provide affordable insurance to high risk drivers through subsidization.	High risk drivers are already subsidized. Further subsidies would lessen incentives and be unfair to safe drivers.
Law Enforcement	
Effective means of enforcing compulsory insurance.	

Investment Income

Investment income is utilized in Ontario, rather than being a drain on available capital.	Integrated world capital markets are readily accessible from Ontario so this factor would have no effect on either the availability or cost of capital. Also, 1982 figures show that ICBC has 82% of its funds in Government of Canada bonds and bank deposits and only 18% in B.C. and municipal bonds.

Quality of Service

Public convenience due to: - one-stop shopping and claims adjusting - less hassle in settling claims - direct dealings with insurance companies.	Poorer service because there is no threat of losing a customer and public employees lack motivation. Studies of public perception also support this view of public companies.

Profits

Profits are used to increase benefits, reduce premiums and absorb losses, rather than being distributed as dividends. Taxes not paid to Federal government.	Loss of corporate taxes must be made up by increasing other taxes. Note: Ontario could ask for profit remission for private companies similar to private provincial power companies.

Social Benefits	
Better organization of driver education and research programs due to centralized information and resources.	Existing education programs have been effective.
In-province head office prevents cash flows to out-of-province head office.	Most Canadian firms have head offices in Toronto and foreign firms also have large offices here.
Greater commitment and responsiveness to social needs.	Potential for use as a political vehicle, violating sound business and insurance practices. Need for mechanisms to control monopoly prices and practices.
Impact on Repair Industry and Costs	
Lower repair costs due to monopoly power over repair shops and more research into new repair methods.	Private insurers presently get discounts from shops for promising volume, a practice which would be inappropriate for a public company. May disrupt healthy competitiveness between repair shops by introducing significant economies of scale, to a unionized oligopoly.
Start-Up Difficulties	Logistical problems associated with starting such a large company from scratch.
Early difficulties are common to all businesses and are worth it for the long-term savings.	Confusion during change-over due to staggered policy renewals.

	Tendency towards higher claims frequency during early stages as people take advantage of what they see as a bottomless public purse.

Philosophical Issues

Insurance premiums should be: - based on individual records - affordable for all - available to all - provide adequate compensation to all injured parties regardless of fault - not force drivers to contribute to private sector profits.	The free market is the cornerstone of a free society. In claims settlement public insurance companies represent the interests of society as a whole, rather than individual customers. Public ownership is not a solution to problems with the products. Public opinion currently favours less government involvement.

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THE STRUCTURE OF THE ONTARIO AUTOMOBILE INSURANCE INDUSTRY

Prepared for the Inquiry Into Motor Vehicle Accident Compensation in Ontario

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EXECUTIVE SUMMARY

This chapter analyzes the Ontario automobile insurance market from the point of view of industrial organization, which is the branch of economics concerned with industry analysis. The first part of the chapter summarizes some of the main currents of the dominant paradigm in industrial organization, which links the outcomes produced by an industry to the structure of that industry. The second part of the chapter examines the structure of the Ontario auto insurance market. We conclude that:

1. There is a large number of firms in the industry.

2. From 1974 to 1979, concentration in the industry increased, while concentration fell between 1979 and 1984.

3. The empirical evidence suggests that for automobile insurance, scale economies were non-existent.

4. The insurance industry does not appear to exhibit economies of scope, which means that multiple line firms do not appear to enjoy any cost advantages relative to single line firms.

5. During the period 1975 to 1984, there was significant entry into and exit from the automobile insurance industry.

6. Net exit from automobile underwriting between 1975 and 1984 implies that industry profitability was below normal, in an economic sense, during the period.

7. The structure of the industry makes collusion among firms extremely unlikely.

8. The market for automobile reinsurance appears to have a competitive structure. There appears to be no difference in the extent to which small and large firms reinsure.

9. The Registered Insurance Brokers Act (Ontario) deters entry into insurance brokerage, to the potential detriment of consumers.

INDUSTRIAL ORGANIZATION THEORY AND RESULTS

Why Market Structure Matters

This chapter presents an analysis of the structure of the Ontario automobile insurance market. Since the number of consumers of automobile insurance is quite large relative to the number of companies writing that insurance, we shall focus on the sellers' side of the market. The rationale for examining market structure is that economic theory predicts that there are strong links between the structure of an industry and the competitive outcomes generated by that industry.

The two extreme examples of market structure are perfect competition and monopoly. In the case of perfect competition, there are so many sellers of a homogeneous product that no one firm can influence the market clearing price. Competition in this market will drive the industry toward an equilibrium where prices are just sufficient to cover costs and provide firms with a normal return to capital, where normal returns are just high enough to prevent firms from leaving the industry, but not sufficient to induce other firms to enter the industry. Another term for normal returns is 'zero economic profits', with the implicit idea that zero profit in an economic sense includes a sufficient risk-adjusted rate of return to maintain the level of capital in the industry. The effect of perfect competition in the absence of cost advantages to large scale production (also referred to as scale economies) is to force firms to produce using the most efficient combination of inputs and to charge prices equal to marginal cost (the cost of producing one more unit of output). It can be shown that when prices equal marginal costs throughout the economy, an improvement in one person's or group's welfare can only be achieved at the expense of someone else, a condition known as Pareto optimality. This analysis leads economists to conclude that competitive markets which drive prices toward marginal cost facilitate an efficient allocation of the economy's resources.

The perfect competition model incorporates some strong assumptions which may not always be fulfilled by real world markets. In particular, the results proved for perfectly competitive markets depend on universal access to costless information, costless entry into and exit from the industry, and the absence of scale economies. The costless information assumption means that neither consumers nor firms need to expend resources in order to inform themselves about market conditions, including product quality and the prices charged by all firms. This may be a particularly unreasonable assumption for the automobile insurance market, where a significant fraction of insurance company expenses seem to be devoted to marketing the product. For example, total Ontario automobile insurance agency and acquisition expenses were 17.5% of premiums in 1985, of which commissions to brokers accounted for 11.5% (source: Insurance Bureau of Canada, 1985 Expense Allocation Program). Of course, not all of these expenses can be counted as marketing expenses; given the available data we can only speculate. However, it is important to remember that the beneficial results which flow from perfect competition do depend on the assumption that the process of competition does not itself consume resources.

The other extreme form of market organization is monopoly, an industry with only one seller. Unlike a perfectly competitive firm, the monopolistic firm does control price. If the goal of the monopoly is to maximize its profits, then it will charge more and produce less than would a perfectly competitive industry producing the same goods. Free from the pressures of competition, the monopoly may also choose to operate less efficiently than a competitive firm, which means that a monopoly will not necessarily earn above normal profits. For example, consider Canada Post Corporation. In any case, absent scale economies, the unregulated monopolistic form of market organization is clearly not in the interests of consumers.

The conclusions regarding monopoly are only true to the extent that the monopoly is able to deter other firms from entering its industry. If costless entry and exit from the industry are possible, then the ability of the monopoly to overcharge, underproduce and operate inefficiently with respect to perfect competition is constrained, since new entrants to the industry could undercut the monopoly's prices and still earn at least normal profits. In fact, new entrants would be attracted to situations where the monopoly was behaving precisely as described in the previous paragraph. This means that to the extent that markets are contestable, i.e., to the extent that costless reversible entry is possible, single-firm industries will approximate the perfect competition equilibrium. In other words, the conditions of entry into and exit from the industry are important aspects of market structure. The theory of contestable markets develops this idea in its purest form (See W. Baumol, "Contestable Markets: An Uprising in the Theory of Industry Structure," American Economic Review, 1982). A contestable market is one where incumbent firms are vulnerable to costless so-called hit-and-run entry; cost conditions are the same for all firms; there are no sunk costs of entry, and entry can occur before incumbent firms have time to respond. The performance of this market will be optimal in the sense that price will be driven to marginal cost, irrespective of the observed market structure. For example, Fama and Laffer show that even if there are only two firms in each industry, and perfectly free entry and exit for each industry, then each firm is in effect a perfect competitor earning only normal economic profits (E. Fama and A. Laffer, "The Number of Firms and Competition," American Economic Review, 1972). Therefore, the theory of contestable markets offers a powerful alternative to structure-based theories by making entry and exit conditions fundamental and the number of firms irrelevant.

Contestability theory has been criticized on the grounds that the assumptions that imply vulnerability to hit-and-run entry ignore the empirical reality of most industries, where incumbent firms do have potential advantages over potential entrants. For example, some models have focused on the entry deterring properties of consumer brand loyalty, which may itself be a function of previous years' marketing decisions by incumbent companies. Nevertheless, contestability theory has underlined the importance of assumptions about sunk costs in the analysis of entry conditions.

While the theory of contestable markets assumes that sunk costs do not exist, the literature on strategic entry deterrence focuses on the ways in which sunk costs can be used to maintain positions of market dominance. In general, the theory of entry deterrence involves a commitment by the existing firm to spend money on some 'strategic' variable such as advertising, research and development, a distribution system or manufacturing capacity up to a level where the expected payoff to an entrant would be zero or negative. It is vital that the investment by the incumbent firm be irreversible, otherwise the investment by the incumbent could be undone in the event of entry, and so would not affect the potential entrant's decision. For example, abstracting from legal restrictions, an incumbent could announce that if entry occurred, it would set prices below average cost in order to render the entrant unprofitable. However, this strategy would cause the incumbent firm to incur a short-run loss if the entrant were forced to leave, or a long-run loss if the entrant remained in the industry. Whenever the incumbent firm raised prices above average cost, entry would be profitable. Therefore, a reversible entry deterring policy which implies sacrifice for the incumbent firm is unlikely to be viewed as credible, because no rational incumbent would choose to implement this strategy.

The previous analysis is founded on short-run considerations where the prospect of future entry by a queue of potential entrants is not considered, and where uncertainty about the true nature of the incumbent is not a factor. When we allow for these elements, the analysis becomes much less straightforward, because we must model how potential entrants form expectations about an incumbent's likely response, given information about the incumbent's previous behaviour. In particular, an incumbent's reputation - possibly for short-run irrational behaviour - may be sufficient to deter entry. If, for example, a potential entrant's management assumed that the incumbent would accept protracted subnormal profitability resulting from a price war, even though this would not be optimal in the long run for the incumbent, then entry would be unlikely. The concept is similar to the idea of deterrence used in formulating military strategy. As long as other players can be convinced that threats will be carried out, then the threats are credible. To the extent that an incumbent firm has demonstrated a history of strong reaction to entry, it seems probable that future entry will be deterred.

Perhaps the most important lesson of the theories concerning entry and exit conditions is that those conditions matter to the outcomes generated by an industry. Given the restrictive assumptions of contestability theory, we cannot dismiss structure as irrelevant in most real world examples. We must, however, consider any legal or other factors that could inhibit entry into the industry, along with our assessment of structure, in order to have a complete picture of competitive conditions in an industry.

The two models, perfect competition and monopoly, provide a description of extremes, and all industries in practice fall somewhere between them. The position of any particular industry can be located along this spectrum by examining the structure of that industry in terms of the number of firms and ease of entry and exit. As we move through the spectrum from industries with a large number of firms to industries with only a few firms, we expect that profitability will rise from the normal level to the supernormal level of monopoly.

Most markets can best be described by oligopoly, the case where there are few sellers. Obviously, the definition of "few" is somewhat subjective; however, oligopoly implies that each seller has the ability to influence market prices and the behaviour of its rivals. While there are many formal models of particular aspects of oligopoly, there is no one universally accepted description of the consequences of this form of market organization. The problem is that the key feature of oligopoly is interdependence of firms: the actions of all the individual firms in an oligopoly are affected by the actions of other firms. This interdependence gives rise to the possibility of many different outcomes for prices, output and profitability in a given oligopoly situation.

In general, most oligopoly models focus on the determinants of successful cooperation among firms in order to achieve results similar to those which would be obtained under monopoly. In order for collusion to be successful, the companies must form a cartel in which there are acceptable rules for assigning market shares, detecting cheating by member firms and punishing cheaters. The problem for the industry is that while it always pays to form a cartel, it also always pays member firms to cheat on the cartel, so that there is natural instability in a collusive oligopoly. The reason that it always pays firms to form a cartel is that by coordinating member efforts, the cartel can reduce output below the competitive level, causing an increase in price above marginal cost. However, at the cartel optimum, characterized by low production and high prices with respect to the perfectly competitive solution, any cartel member can earn positive economic profits simply by increasing its output and selling it at a price just below the cartel price. To the extent that all cartel members engage in this form of cheating, the cartel will break down and the industry will behave as if it were perfectly competitive. We can draw some general inferences about the likelihood of the existence of a sustainable cartel from an examination of market structure. In particular, it will be easier to find agreement, coordinate price and output decisions, and police member behaviour when the number of firms comprising the cartel is relatively small. Policing a cartel requires identifying and punishing firms that break cartel rules. If there are many firms in the industry, then the effect of cheating by any one member of the cartel will probably have a small impact on each other firm, so that retaliation by any one firm will probably be unjustified by the resulting potential gains to the punishing firm. With fewer firms in the industry, the actions of any one firm will be more visible and the relative benefits of punishment probably greater. Therefore, the probability that a successful cartel will be established is inversely related to the number of firms in the industry. It is likely that the smaller the number of firms, the greater the probability of non-competitive prices.

Economic theory has identified many plausible reasons for a positive relationship between market power, the ability of firms to elevate price above marginal cost, and market structure. A key element of market structure is the number of firms in the industry, although other important aspects of structure include barriers to entry into the industry by potential rivals and exit from the industry by existing competitors, as well as the extent to which buyers from the industry are themselves organized. Nevertheless, the relationship between the number of firms in the industry and market power is not perfect. It is possible for an industry with many firms to operate as a cartel and for an industry with only two or three companies to achieve a perfectly competitive outcome; however, these cases are unlikely exceptions to the general theory.

Structure, Conduct and Performance

The analysis of market structure forms part of the general approach of economics to the analysis of industries which has become known as the structure-conduct-performance model. In fact, we used this model in the previous section to draw inferences about the conduct and performance of industries from an examination of their structure. Basically, the structure-conduct-performance model implies that the key to understanding and predicting the performance of an industry in terms of profitability, growth, marketing strategy, technological progress, etc., is to be found in the structure of the industry. While we focused on the number of firms as the most important element of structure in the previous section, structure also includes factors like the ease of entry into the industry, the cost conditions under which production occurs, and the price elasticity of demand for the product (price elasticity of demand is essentially a measure of the degree to which consumers are sensitive to price in deciding how much to buy). The conduct of firms, which we expect to be heavily influenced by the structure of the industry, includes the objectives of the firms, their price-setting behaviour, marketing and investment strategies, and behaviour toward rivals. Conduct generates the industry's performance, which includes profitability, allocative and technological efficiency, and any other social goals of interest. Figure 1 presents a list of the elements of structure, conduct and performance, starting with the basic conditions which characterize the industry's environment. Performance, particularly allocative efficiency, the degree to which price equals marginal cost, depends on the conduct of buyers and sellers in areas such as implicit and explicit cooperation or rivalry, marketing strategies and product development, to name three of the many aspects of the behaviour of market participants. For example, we expect prices to exceed marginal cost when firms collude, either explictly or implicitly. Conduct in turn depends on the structure of the market, which can be characterized by the number and size distribution of buyers and sellers, cost conditions in production, barriers to entry and exit by sellers, product differentiation and the presence or absence of substitutes.

FIGURE 1

The Structure, Conduct, Peformance Model

Basic Conditions

Supply	Demand
Raw Materials	Price
Sensitivity	Substitutes
Technology	Rate of Growth
Unionization	Purchase Method
Product Durability	Marketing Method
Cyclical/Seasonal	
Public Policies	

Market Structure

Number of Sellers and Buyers
Product Differentiation
Barriers to Entry
Cost Conditions
Vertical Integration
Conglomerateness

Conduct

Pricing Behaviour
Product Strategy
Advertising
Research and Innovation
Capital Spending
Legal Tactics

Performance

Technological and Allocative Efficiency
Other Social Criteria

(From: Scherer, F.M. Industrial Market Structure and Economic Peformance. - Houghton Mifflin Company, 1980).

Of course, there are feedback effects not discussed above. For example, structure itself depends on the past conduct of buyers and sellers, which may be determined by past performance. In particular, we would expect some firms to exit from a chronically unprofitable industry, causing a change in structure, in this case an increase in concentration. Furthermore, the analysis of market structure alone cannot be used to draw inferences about conduct and performance. For example, increased seller concentration makes collusion among sellers easier but does not guarantee that cooperation will actually occur. Nevertheless, since market structure has been found to have a strong influence on conduct and performance, any industry analysis must begin with a discussion of structure. The idea that the structure of an industry largely conditions the activities of the companies in that industry means that we shall emphasize the nature of the industry rather than the nature of the firms in the industry. In other words, structure is fundamental.

While actual concentration is likely to be an extremely important determinant of price and profitability, there are several constraints on the behaviour of any industry. These constraints are environmental, from the viewpoint of the industry, in the sense that they are external to the industry. In particular, the presence of substitutes limits the power of an industry over its customers. The reason for this result is quite straightforward. A substitute good is defined as one which has a high cross-price elasticity of demand with the good in question. Essentially, this implies that when the price of good x rises, the consumption of its substitute good rises more than proportionately. Economics textbooks often assert that jam and marmalade are substitutes. Furthermore, the presence of potential entrants checks monopolistic tendencies in oligopolistic industries, as contestability theory demonstrates. Finally, a large number of companies is no guarantee of competition, but simply means that in the absence of non-government-sponsored cooperation, collusion is more difficult.

Economic Definition of the Market

Most theoretical economics deals with a homogeneous product, and the implicit assumption is that there are no close substitutes for that product. For practical work, it is necessary to define "the good", "the market", "the firm" and "the industry". Defining the good can become quite complicated, although for the purposes of this study it is straightforward because there are really no substitutes for automobile insurance. In general, economists rely on the concept of cross-price elasticities of demand to identify products and markets, or else they use the standard industrial classification. The definition of the firm is somewhat problematic because most firms produce many different products for different markets. Ideally, the "firm" of interest to industrial economists is the division of an actual company producing for a single market. Finally, when we speak of the industry, we can only use data on current participants in the market, since we cannot observe the set of firms which might enter the business. Furthermore, there is an important geographical component to the definition of the market. For example, we could examine the market for a particular good at the level of Toronto, Ontario, Canada, North America, or the world. It is important to remember that the measured levels of concentration will depend on the definition of the product and the market. In general, the more restrictive the definition, the greater the concentration. For example, concentration for meat packing will be greater than for the food industry as a whole. Furthermore, the Ontario market for a given product will be more concentrated than the Canadian market.

Measurement of Market Structure

While economic theory suggests that the vigour of competition is related positively to the number of firms in the relevant industry, the degree of inequality can also matter. For example, an industry with 100 sellers, each with a 1% market share, is likely to be very different from another also with 100 sellers, one with a 90% market share while the remaining 99 produce 10% of industry output. A simple measure that accounts for inequality is the n-firm concentration ratio, which is the sum of the market shares of the n largest firms. The most common are C4, the four firm concentration ratio; C8, the eight firm ratio; and C20, the 20 firm ratio.

There are no firm benchmarks for these concentration ratios which we can use to infer collusion or competition. We can be reasonably sure that it will be easier to enforce collusion in an industry where C4 is 90% than in one where C4 is 15%. Furthermore, we must use some judgment in assessing the implications of concentration ratio data since these measures ignore the constraints on the industry imposed by the presence of substitutes and potential entrants. Nevertheless, concentration ratios provide useful points of comparison across industries or within an industry across time.

A graphical method for presenting the information from a set of n-firm concentration ratios is the Lorenz curve, which plots the percentage of total industry sales accounted for by any given fraction of the total company population, with the firms ranked in order of market share.

If all firms had the same market share, then the Lorenz curve would be a straight line. The Lorenz curve approach has two main disadvantages. First, because the Lorenz curve is simply a measure of inequality, there is a danger of drawing paradoxical inferences when an industry is comprised of a small number of equally sized firms. For example, the Lorenz curve for a duopoly (an industry with two firms) with firms of equal size is a straight line, but this does not imply that monopoly power is absent in this case. The second problem with the Lorenz curve is that its shape is sensitive to errors in defining the number of firms in the industry. The more borderline firms included, the higher the implied degree of inequality.

A measure of concentration which takes into account both the number of firms in the industry and their relative sizes is the Herfindahl index, which is defined as the sum over all firms of the square of each firm's market share. For a pure monopoly, the value of the Herfindahl index is 1.0. As the number of firms increases, the value of the Herfindahl index falls. Conversely, as the degree of inequality among firms rises, so does the value of the Herfindahl index. Because market shares are squared, the Herfindahl index places more weight on the values for large firms.

While the n-firm concentration ratio and the Herfindahl index are quite different in theory, in practice these measures tend to yield similar industry rankings and have highly correlated values. Scherer (1980) reports a correlation of .94 between C4 and H (the Herfindahl index) for U.S. manufacturing industries, (a correlation of 1.0 implies a perfect linear relationship) and other authors have observed this close relationship (see, for example, R. Kilpatrick, Review of Economics and Statistics, May 1967).

The previous discussion has focused on seller concentration; however, analogous results and measures hold for the buyer side of the market. In particular, buyer power increases as the number of buyers declines, and we can describe the demand side of the market using the same measures we applied to the supply side.

The Determinants of Market Structure

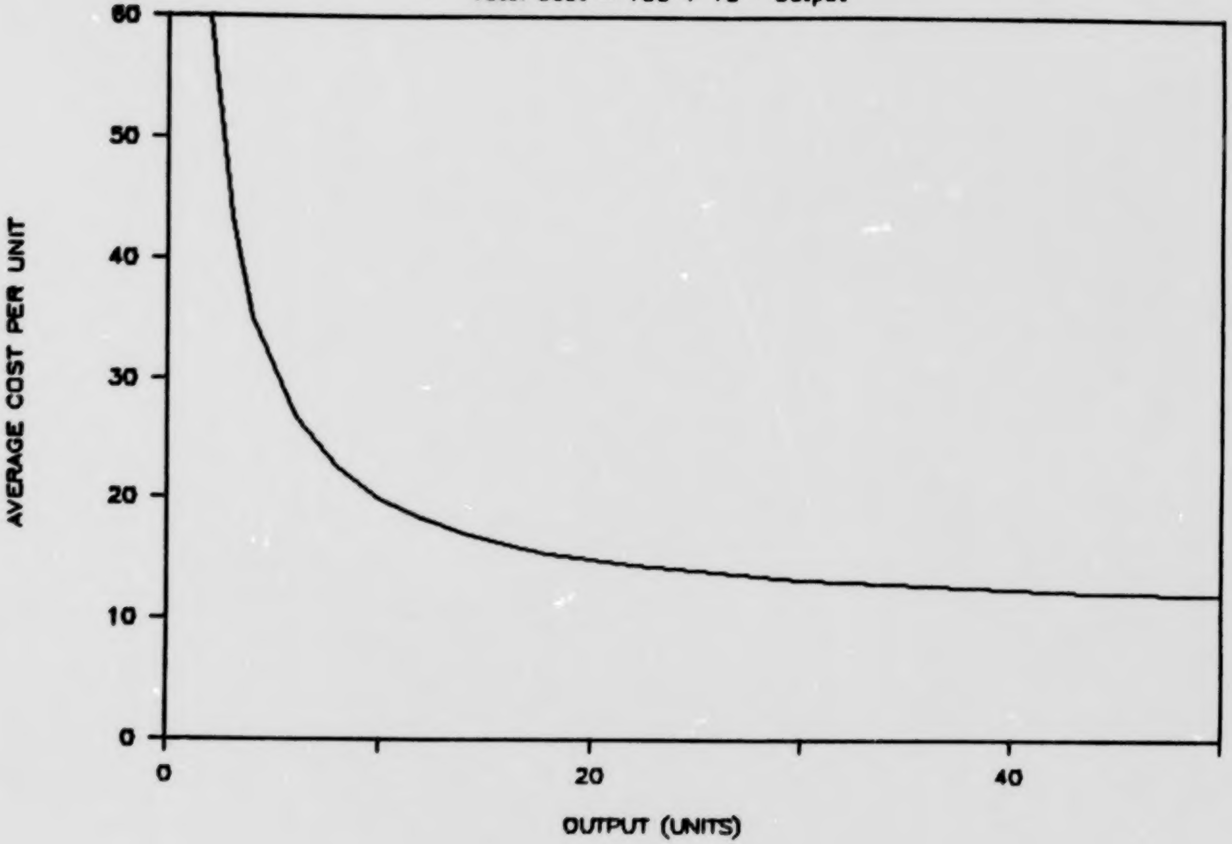
Market structure is not simply random, but rather arises from underlying economic conditions. Any attempt to assess whether a particular market structure is appropriate for an industry therefore needs to be founded on an appraisal of these conditions.

Cost conditions can have a significant effect on the degree of concentration. Consider an industry where each firm faces different average costs at different levels of output as described by Figure 2 (average cost is simply total cost divided by unit output).

FIGURE 2

EXAMPLE OF SCALE ECONOMIES

Total Cost = 100 + 10 * Output



In this situation, a firm with a high level of output can produce at a lower average cost than a smaller firm. Situations like this arise where the ratio of fixed cost to variable cost is relatively large. In economic terms, this industry is characterized by scale economies, otherwise known as increasing returns to scale. The level of output at which average cost flattens out is known as minimum efficient scale. Where there are scale economies, the number of firms is determined by the size of the market relative to minimum efficient scale. For example, consider an industry where the minimum efficient scale is 100,000 units per day and market demand is 1,000,000 units per day. Assuming normal competitive interaction, the maximum number of firms in the industry is 1,000,000/100,000, which equals 10.

Related to the concept of scale economies is the learning curve phenomenon, first documented in aircraft maunfacturing (see M. Porter, Competitive Strategy. - Basic Books, 1980). The learning curve describes the reduction in unit costs associated with increases in cumulative output. This is simply a way of saying that firms learn by doing. To the extent that the learning curve describes an industry, then the incumbents in that industry have an advantage over potential entrants, since the incumbents have built cumulative output volume and therefore face lower unit costs than their potential rivals. Of course, technological change can nullify learning curve effects. Furthermore, incumbent firms must keep their experience proprietary in order to use it as a barrier to entry. To the extent that potential entrants can buy expertise, the learning curve is no longer an entry deterrent.

Economies of scope offer firms a potential way of circumventing the disadvantages of being small in an industry characterized by scale economies. Essentially, economies of scope exist when unit costs for a firm which competes in several markets are lower than unit costs for individual firms operating in single markets. Economies of scope arise because of shared expenses across industries. For example, a firm may use one distribution system to service several different products. Similarly, a company may be able to use one head office to manage several business lines. In the insurance industry, it may be the case that small firms can share expenses across several different product lines and therefore maintain their competitive position in the face of larger rivals.

Aside from cost conditions, marketing strategy may influence industry structure. In particular, brand loyalty resulting from promotion and product policy may render consumers relatively insensitive to price, and may hinder entrants' attempts to win market share. Here, marketing strategy serves a dual role: it erects a barrier to entry (structure) and facilitates the maintenance of prices in excess of marginal cost (conduct). The idea that marketing strategy, referred to by industrial economists as product differentiation, might deter entry and raise the profitability of incumbent firms, is seminal (see J. Bain, Barriers to New Competition. - Harvard University Press, 1956). Bain cites high levels of advertising-to-sales ratios as a major source of product differentiation barriers, but recognizes that other aspects of product differentiation include product design and control of distribution channels. While one might argue that as long as potential entrants are not forced to pay costs greater than incumbents have already payed, there is no asymmetry and therefore no entry barrier, it seems clear that advertising has anticompetitive potential for two reasons. First, advertising may reduce the elasticity of demand, in effect making consumers less sensitive to the prices charged by a particular company. To the extent that a firm can use advertising to make consumers believe that there are no good substitutes for its product, it can raise prices above marginal cost. In particular, it can be shown that (P- MC)/P=1/ED, where P is the price charged, MC is the firm's marginal cost, and ED is the elasticity of demand for the firm's product. ED is here defined as -(P/Q)*(dQ/dP), where Q is the quantity consumed and dX means the change in X, which means that elasticity of demand is simply the percentage change in consumer demand induced by a one percent change in price. It is easy to see that as consumers become less price sensitive, in other words as consumers reduce their demand by less for a given price change, then the price cost margin (P-MC)/P rises. The alternative view of advertising is that it simply conveys information to consumers without affecting their demand elasticity and therefore without affecting price. We shall cite some empirical evidence to suggest that the former theory of the effect of advertising is correct. The second reason why advertising may be anticompetitive is that there may be scale economies in advertising. Comanor and Wilson argue that media volume discounts create these scale economies (W. Comanor and T. Wilson, "Advertising, Market Structure and Performance," Review of Economics and Statistics, 1967). Furthermore, given its nature as a semi-fixed cost (fixed costs do not vary with output), advertising induces scale economies.

Another area in which economies of scale can act as an entry barrier is research and development. Some authors have found economies of scale in some aspects of research and development (see D. Mueller and J. Tilton, "Research and Development Costs as a Barrier to Entry," Canadian Journal of Economics, 1969).

The presence of economies of scale not only in production but also, perhaps, in advertising and research poses a dilemma for entrants, which are forced to enter at the large scale needed to match incumbents' costs, thereby increasing the financial and business risks of the new venture, or enter at a lower, less risky scale and suffer the resulting disadvantage in unit costs. Advertising and research expenditures are particularly risky because spending on these items cannot be recovered in the event that the new entrant fails. To the extent that capital markets are risk averse, under these conditions entrants will face a higher cost of capital than incumbent firms, which will create another cost disadvantage for entrants.

This brief review of industrial economics theory has highlighted a fundamental prediction of industrial economics. Where the number of firms is small and barriers to the entry of new firms can be erected, it is likely that price will be maintained above marginal cost and firms will earn supernormal profits. In other words, structure interacts with entry barriers to produce superior profitability. Of course, the theory on the nature and effect of these entry barriers is somewhat speculative, and some of it is open to debate among economists. It is therefore worthwhile to examine the empirical evidence in order to test the validity of the theoretical predictions about the effect of market structure on industry performance.

The Price and Profit Consequences of Market Structure

Statistical evidence has generally supported the predictions concerning the impact of market structure on industry profitability summarized above. Joseph Bain conducted pioneering work in the field by attempting to separate the profit consequences of concentration and barriers to entry for a sample of 20 U.S. manufacturing industries.

Bain defined very high barriers to entry as existing in industries where firms had the ability to hold prices 10% or more above minimum unit costs without inducing significant new entry, and substantial barriers to entry as existing where firms could maintain prices 5 to 9% above minimum unit costs without inducing entry. Bain sorted the oligopolistic industries into those with C8 greater than 70% and those with C8 less than or equal to 70%. Bain's results are summarized in Figure 3.

FIGURE 3

Effects of Concentration and Entry Barriers on Return on Equity

	Entry Barriers		
Concentration	Very High	Substantial	Low
1947-1951			
High	19.0	14.0	15.4
Moderate	--	12.5	10.1
1950-1960			
High	16.4	11.1	11.9
Moderate	--	12.2	8.6

Table reports average industry return on equity.

(Source: 1947-1951: Bain, Joe. Barriers to New Competition. - Harvard University Press, 1956.

1950-1960: Mann, H. Michael. "Seller Concentration, Barriers to Entry and Rates of Return in Thirty Industries," Review of Economics Statistics, August 1966.)

As predicted, the more concentrated industries had generally higher rates of return than the more fragmented industries. Furthermore, the highly concentrated industries with very high entry barriers had substantially greater rates of return than the highly concentrated industries with lower entry barriers. The evidence is based on a rather subjective definition of entry barriers. Furthermore, Bain's use of return on equity as a measure of profitability is flawed, because return on equity is a function of both return on assets and leverage (the extent to which the company uses debt in its capital structure). Since we are interested in profitability rather than the effects of capital structure, the variable of interest is return on assets; however, Bain presents no information which allows us to disentangle the 'real' and 'financial' effects. Nevertheless, Bain's results do lend some support to the theory that the interaction of concentration and entry barriers determines industry profitability.

Subsequent studies of the determinants of industry profitability used the statistical technique of multiple regression analysis on larger samples of industries. Essentially, multiple regression measures the effect of each explanatory variable on some dependent variable, holding the effect of all other explanatory variables constant. Here, we are interested in the effect of concentration on profitability, holding all other variables constant. A typical example of this work is Weiss' study of 1963 U.S. Census of Manufacturers data for 399 industries (L. Weiss, "The Concentration-Profits Relationship and Antitrust" in H. Goldschmid et al., eds., Industrial Concentration: The New Learning. - Little, Brown, 1974). Weiss found that industry price-cost margins were positively and significantly associated with seller concentration, the ratio of capital to output, the ratio of advertising to sales and past output growth. These results are typical of the vast majority of studies of the concentration-profitability relationship as found by Weiss in his survey of 54 papers on the subject (see above). The overwhelming majority of these studies have some measure of success in statistically relating the basic structural variables to profitability. Concentration in one form or another usually has a significant positive influence. At least some of the variables used as proxies for entry barriers, particularly advertising intensity (defined as the advertising to sales ratio), usually prove significant in any particular study. Nevertheless, there are two important caveats associated with this body of empirical work.

The first problem is one of statistical methodology. Most of the empirical work in industrial organization relies on single equation techniques which, in effect, ignore the feedback linkages from performance and conduct to structure. In the language of statistics, these studies suffer from simultaneous equations bias, making the conclusions we draw from them somewhat unreliable. One study which attempts to overcome this problem estimates three simultaneous equations explaining advertising intensity, concentration and the price-cost margin (see S. Martin, "Advertising, Concentration and Profitability: The Simultaneity Problem," Bell Journal of Economics, 1979). Martin finds that the most important influences on the price-cost margin are positive effects due to advertising intensity and the growth rate of demand, together with a negative effect of the percentage of domestic sales accounted for by imports, while concentration is insignificant. In a similar study for Canadian data, advertising and a measure of scale economies were positive and significant determinants of price-cost margins, while concentration was significant only when the measure of scale economies was excluded (see V. Gupta, "Structure, Conduct and Performance in Canadian Manufacturing Industries: A Simultaneous Equations Approach," PhD dissertation, University of Toronto, 1977). It is not appropriate to infer from these studies that concentration is irrelevant for two reasons. First, as we have shown, concentration itself depends on scale economies. In a comprehensive simultaneous equations study of Canadian industry, Caves, Porter and Spence conclude that "scale economies wield their influence on profits through concentration and not as the separable influence hypothesized by the traditional theory of entry barriers" (R. Caves, M. Spence and M. Porter, Competition in the Open Economy. – Harvard University Press, 1980, p. 254). Second, the concentration measures used in these studies are themselves flawed, since they exclude foreign firms which may account for large fractions of given markets.

The second problem with the statistical work on the relationship between market structure and profitability is that this work tends to ignore capital market considerations. In particular, the price-cost margins reported as the dependent variables either ignore altogether an imputed cost of capital, or simply use some benchmark interest rate without adjusting it for the risk of the particular business. Modern finance theory predicts that the return on the equity component of a firm's capital structure is a positive function of the extent to which the firm's returns are high when returns on the risky asset market as a whole are high (this theory is known as the capital asset pricing model, or CAPM). One implication of CAPM is that different firms are quite likely to have different returns on equity **in equilibrium**, which means that an observation of high profitability in one industry relative to another may simply illustrate the relative risks of the two industries.

In summary, the statistical evidence does not reject the hypothesis that more highly concentrated industries protected by entry barriers tend to earn higher rates of return than less concentrated industries without entry barriers. One explanation of this tendency toward greater profitability is that explicit and implicit collusion among firms is easier in more highly concentrated industries. However, much of the empirical evidence can be criticized on statistical, financial and definitional grounds. A priori, we cannot conclude that concentration alone is evidence of market failure or excess profitability. However, we can conclude that lack of concentration gives us very strong grounds for believing that collusion and excess profitability are unlikely to be present.

THE STRUCTURE OF THE ONTARIO AUTOMOBILE INSURANCE MARKET

Given the predictions of industrial organization theory, we can draw some tentative conclusions about the state of competition in the Ontario automobile insurance market by examining the structure of that market. In order to correctly apply the theory, we need accurate definitions of the market and the firm.

Definition of the Market

Most work on market structure uses total revenue as a descriptor of firm size. In principle, this implies that for the automobile insurance industry, we should use net premiums written, which are simply direct premiums written less reinsurance ceded to other companies (or plus reinsurance accepted). However, at the provincial level, we only have data on direct premiums written by a company (see Superintendent of Insurance for Ontario, Annual Report, 1986, which presents 1984 data). Nevertheless, it can be argued that direct premiums written does provide some information about the relationship between consumers and individual companies which is excluded from the net premiums written measure. Consider a hypothetical industry where consumers deal with a monopoly retailer which purchases its goods for resale from a competitive industry. Since in this example, consumers are dealing with a monopoly, they will probably pay higher prices than they would if the competitive industry supplied them directly. Similarly, when firms cede reinsurance, they are in effect acting as retailers to consumers. In order to measure the relative market power of consumers and insurers, we need to consider total sales to consumers by individual companies.

Direct premiums written does have flaws, chief among which is that it gives no information about the market power of reinsurers. If, for example, a large number of firms retailed insurance which they then ceded to a monopoly reinsurer, then the direct premiums measure would drastically understate the degree of market power in the industry.

Another problem that arises in defining the market is that there are in fact several sub-markets for automobile insurance in Ontario. For example, taxicab owners face a very different insurance market than non-commercial drivers. This means that even if the overall insurance industry appears to be competitive, certain consumers may actually face a very limited choice of companies willing to offer them auto insurance. Given the aggregated nature of public statistics on the automobile insurance market in Ontario, it is practically impossible to do more than present interview-based evidence on the structure of these sub-markets. The particular sub-markets we shall be concerned with are taxicabs, long-distance trucking, farm equipment, Northern Ontario, bad drivers and small towns. Therefore, most of the evidence on market structure presented here will apply strictly to insurance for non- commercial drivers for whom access to brokers and/or agents is available.

Definition of the Firm

In 1984, there were 157 companies writing automobile insurance in Ontario (source: Superintendent of Insurance for Ontario, Annual Report for Business of 1984, Toronto, 1986). This figure overstates the true number of economic entities, since many of these firms had the same owner. For example, the Economical Group owned Waterloo Insurance, Economical Mutual Insurance, Missisquoi and Rouville

Insurance and Perth Insurance (source: Canadian Insurance Statistics. – Toronto, 1987). We shall define a group as the collection of all insurance companies with the same owner. There were 112 groups writing insurance in Ontario in 1984, of which 63 accounted for 99.09% of direct premiums written. While it is impossible to know whether the companies in a given group act independently or otherwise, it is true that ownership confers legal control, which includes the power to coordinate the activities of group members. Given this potential control, it is reasonable to proceed with the assumption that the relevant entity for economic analysis is the group.

FIGURE 4

Market Shares of Leading Ontario Automobile Insurers

Company/Group - 1984	Share of Direct Premiums Written
Co-Operators Insurance	9.39%
State Farm Insurance	6.88%
Royal Insurance Group	5.97%
Economical Group	5.58%
Pilot	4.90%
Allstate Insurance	4.20%
General Accident Assurance	3.97%
Zurich	3.64%
Dominion Group	3.47%
Safeco Insurance Group	3.16%
Commercial Union Assurance	3.00%
Home	2.85%
Phoenix Continental Group	2.51%
Fireman's Fund	2.49%
Travellers Canada Group	2.27%
Wawanesa	2.13%
Scottish & York	2.05%
Simcoe Erie Group	1.97%
Canadian General Group	1.92%
Gore Mutual	1.60%

Company/Group - 1979	Share of Direct Premiums Written
Royal Insurance Group	13.29%
Co-Operators Insurance	11.86%
Canadian General Group	5.89%
State Farm Insurance	5.85%
Allstate Group	5.01%
Dominion Group	4.96%
Economical Group	4.53%
Zurich	4.40%
Commercial Union Assurance	4.12%
Fireman's Fund	3.69%
General Accident Assurance	3.12%
Pilot	3.03%
Phoenix Continental Group	2.02%
Travellers Canada	1.93%
Gore Mutual	1.92%
Liberty Mutual Group	1.76%
Wawanesa	1.70%
Guardian	1.68%
Constitution Insurance	1.42%
Scottish & York	1.30%

Company/Group - 1974	Share of Direct Premiums Written
Co-Operators Insurance	8.61%
Royal Insurance Group	7.23%
Dominion Group	6.46%
State Farm Auto	5.12%
Economical Group	4.40%
Zurich	4.03%
Allstate Group	3.92%
Pilot	2.81%
General Accident Assurance	2.81%
Guardian	2.35%
Commercial Union Assurance	2.30%
Travellers Canada Group	2.29%
Gore Mutual	2.18%
Hartford Fire	2.00%

Company/Group - 1974	Share of Direct Premiums Written
Wellington	1.99%
Wawanesa	1.93%
Lumbermens Mutual	1.74%
Canadian General Group	1.65%
Home	1.50%
Lloyd's	1.26%

(Source: Superintendent of Insurance of Ontario. Annual Report. – Toronto, 1986.)

Concentration and Market Shares: 1974 to 1984

Figure 4 (page 248) presents the market shares for automobile insurance in Ontario of the top 20 groups for 1974, 1979 and 1984. Figure 5 shows some of the turnover in market share rankings from 1974 to 1984.

FIGURE 5

Turnover of Rankings by Market Share

Company/Group	Ranking by Market Share		
	1984	1979	1974
Co-Operators General	1	2	1
State Farm Auto	2	4	4
Royal Insurance Group	3	1	2
Economical Group	4	7	5
Pilot	5	12	8
Allstate Insurance Group	6	5	7
General Accident Assurance	7	11	9
Zurich	8	8	6
Dominion Group	9	6	3
Safeco Group	10	25	26
Commercial Union	11	9	11
Home	12	21	19
Phoenix Continental Group	13	13	30
Firemans Fund of Canada	14	10	29
Travellers Group	15	14	12
Wawanesa	16	17	16

Company/Group	Ranking by Market Share		
	1984	1979	1974
Scottish & York	17	20	27
Simcoe Erie Group	18	41	59
Canadian General Group	19	3	18
Gore Mutual	20	15	13

(Source: Superintendent of Insurance for Ontario. Annual Report. – Toronto, 1986.)

The data in Figure 5 indicate that there was some stability in rank by market share among the industry leaders between 1974 and 1984. For example, of the top 10 firms in 1984, 7 were in the top 10 in 1979 and 9 were in the top 10 in 1974. The group comprised of the 11th to 20th largest firms showed slightly more variability. Of the 11th to 20th largest in 1984, 5 were in this group in 1979 and 6 were in this group in 1974. Furthermore, three companies or groups, Co-operators General Insurance, State Farm Auto and the Royal Insurance Group, were consistently among the top four companies in each of 1974, 1979 and 1984. Of course, there were exceptions to the general pattern of stability over 1974 to 1984. The Canadian General Insurance Group's rank rose from 18 in 1974 to 3 in 1979, only to fall back to 19 in 1984. In addition, the Simcoe and Erie Group's rank increased from 59 in 1974 to 18 in 1979. Nevertheless, the information in Figure 5 suggests that companies that were large in 1974 tended to be large in 1984.

A more formal test of these propositions regarding the evolution of market shares between 1974 and 1984 is a regression of 1984 market share on 1974 market share for each company. Linear regression is simply a technique for plotting a line through a scatter of points. The particular line is chosen in order to minimize some criterion function, in this case the sum of the squared deviations between the actual data points and the line itself. The form of the regression equation is simply:

$$Y = A + B*X$$

where Y is the variable to be explained (the dependent variable) and X is the variable on which Y depends (the independent variable). Figure 6 reports ordinary least squares parameter estimates for the regressions:

SOM(i,1984) = A + B*SOM(i,1974)

and

SOM(i,1984) = A + B*SOM(i,1979)

where SOM(i,19xx) is the market share as measured by direct premiums written for firm i in year 19xx, and the parameters A and B are constants to be estimated.

The magnitude of the estimate of B gives us information about the evolution of market share across firm sizes. For example, if the value of B is 1.0, then on average the market shares for all companies in the second period are equal to the market shares in the first period. Since this is a statistical relationship, a value of 1.0 for B does not mean that market shares are equal in the two periods for each company, simply that on average the shares are equal. The R-squared statistic reports the closeness of the linear approximation. An R-squared of 1.0 implies a perfect fit of the regression line to the data, while an R-squared of 0.0 means that there is no linear relationship between the dependent and independent variables. Appendix 1 proves that if B equals 1.0, then the large firms maintained their market share. Similarly, if B is greater than 1.0, the large firms of the initial period increased their market shares, while if B is less than 1.0 it implies that large firms lost market shares over the period (this result is due to G. Quirin et al., Competition, Economic Efficiency and Profitability in the Canadian Property and Casualty Insurance Industry. - Toronto, 1974).

FIGURE 6

Evolution of Market Share, 1974 to 1984

Regression: SOM(1984,i)=A+B*SOM(1979,i)

A=0.23
B=0.69
R-squared = .79

Regression: SOM(1984,i)=A+B*SOM(1974,i)

A=-.01
B=.98
R-squared = .80

The regression results suggest that between 1974 and 1984, large firms maintained their relative positions since the estimate of B for that period is close to 1.0. Similarly, between 1979 and 1984, the large firms of the initial period lost market shares, since the estimate of B for that period is 0.69.

Lorenz curves for 1974, 1979 and 1984 reported in Figure 7 provide a graphical summary of the distribution of market shares over the period. In general, the extent of inequality among firms' market shares increased between 1974 and 1979, as the Lorenz curve shifted further away from the 45 degree equality line. Between 1979 and 1984, the curve shifted in the direction of more equality among firms.

While the top 20 firms in the industry accounted for no less than two thirds of direct premiums written in any year from 1974 to 1984, market share rankings for firms in that group provide only a partial description of the industry's structure. The concentration ratios in Figures 8 to 12 reveal some significant trends in the evolution of the structure of the Ontario automobile insurance market, while Figure 13 provides concentration ratios for other industries for the purpose of comparison.

FIGURE 7

LORENZ CURVES

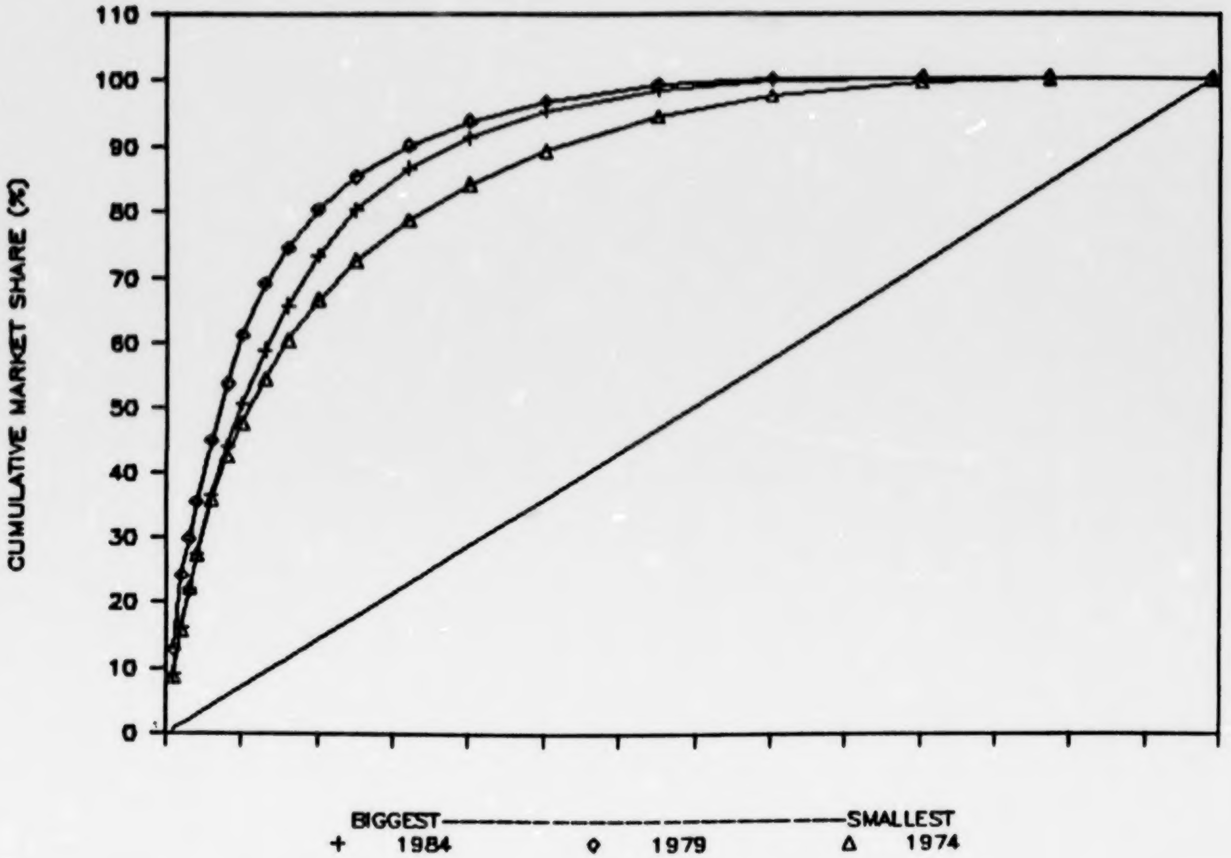


FIGURE 8

Concentration Ratios for Ontario Automobile Insurance

	C4	C8	C20	H
1974	27.43	42.59	66.59	0.03248
1975	28.90	44.28	67.62	0.03509
1976	30.46	47.86	71.88	0.03944
1977	33.90	51.21	75.17	0.04657
1978	36.66	54.21	79.81	0.05426
1979	36.89	55.79	83.48	0.05589
1980	33.32	51.39	77.89	0.04745
1981	31.10	48.34	75.32	0.04242
1982	27.57	44.51	71.80	0.03713
1983	27.94	44.84	73.95	0.03751
1984	27.82	44.53	73.95	0.03702

(Source: Superintendent of Insurance for Ontario. Annual Reports, 1974-1984).

FIGURE 9

C4 TREND

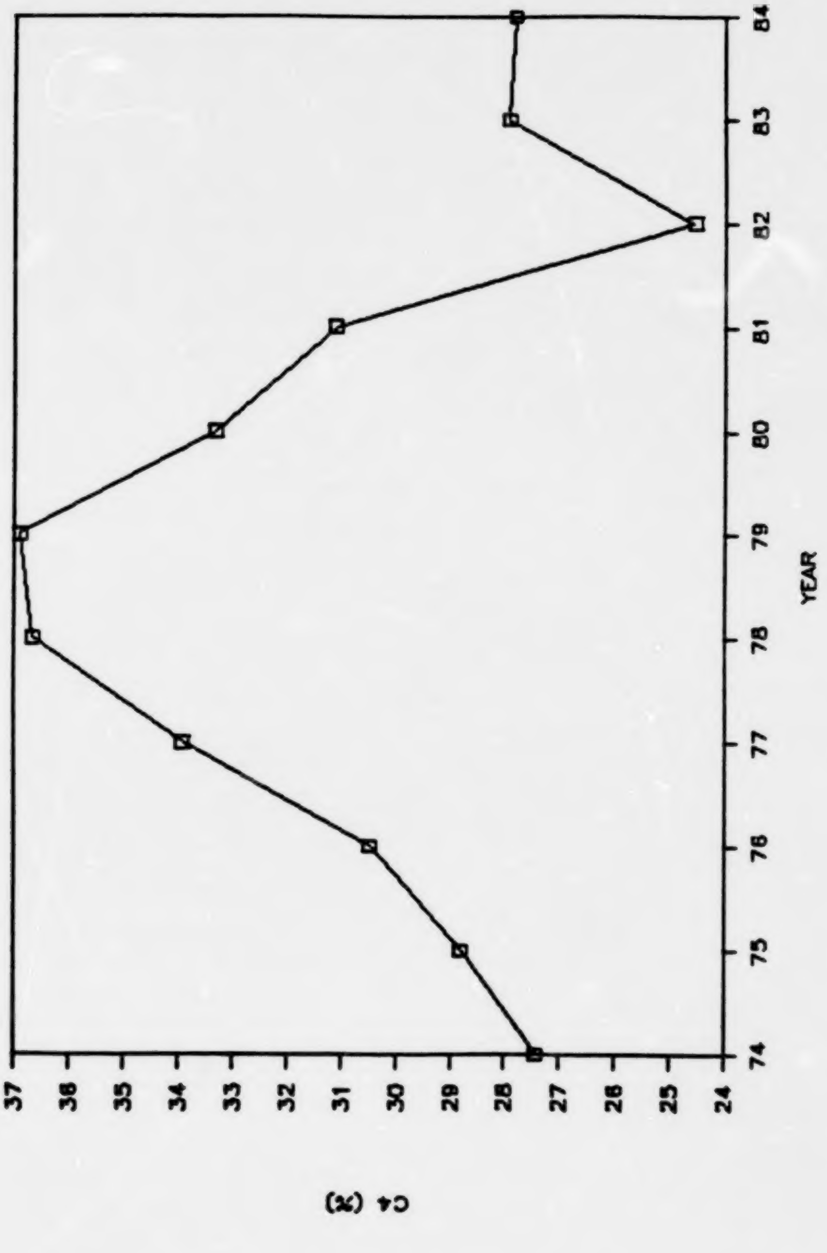


FIGURE 10

C8 TREND

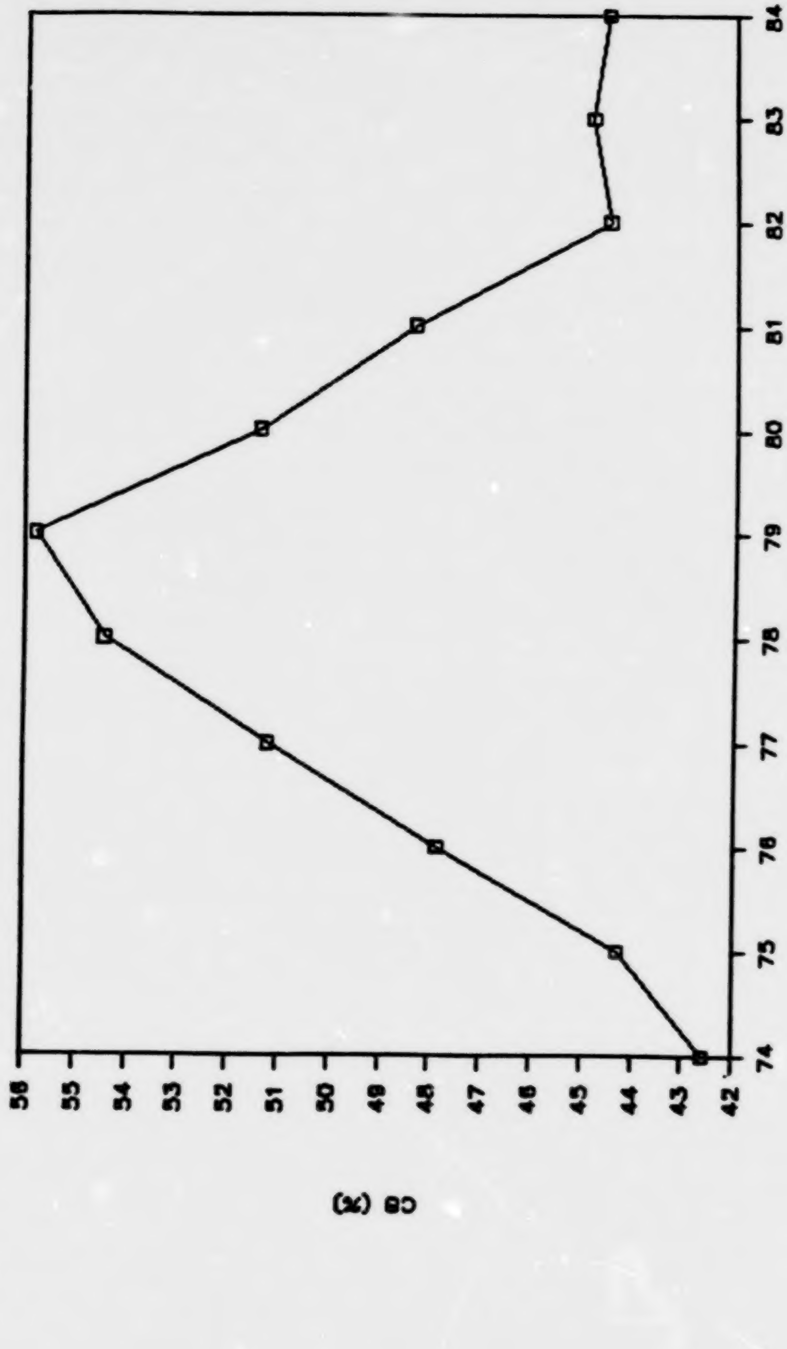


FIGURE 11

C20 TREND

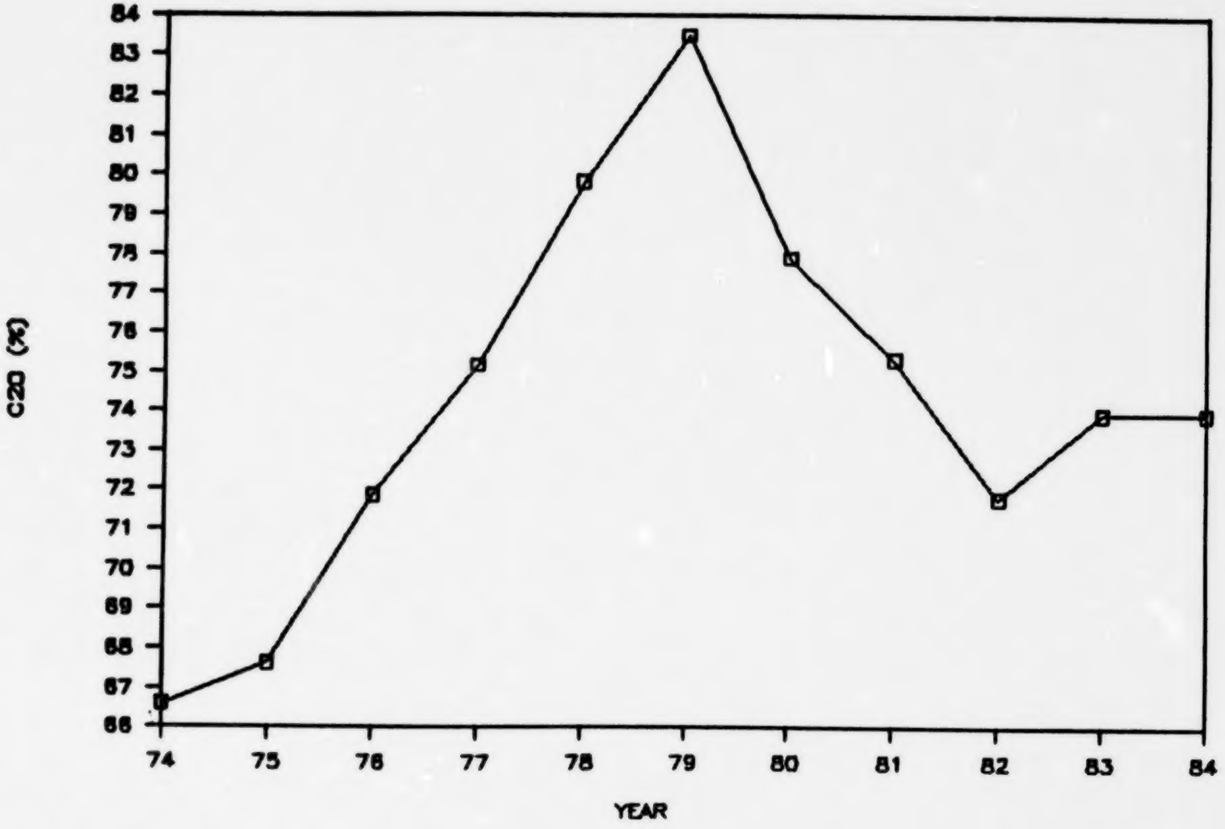
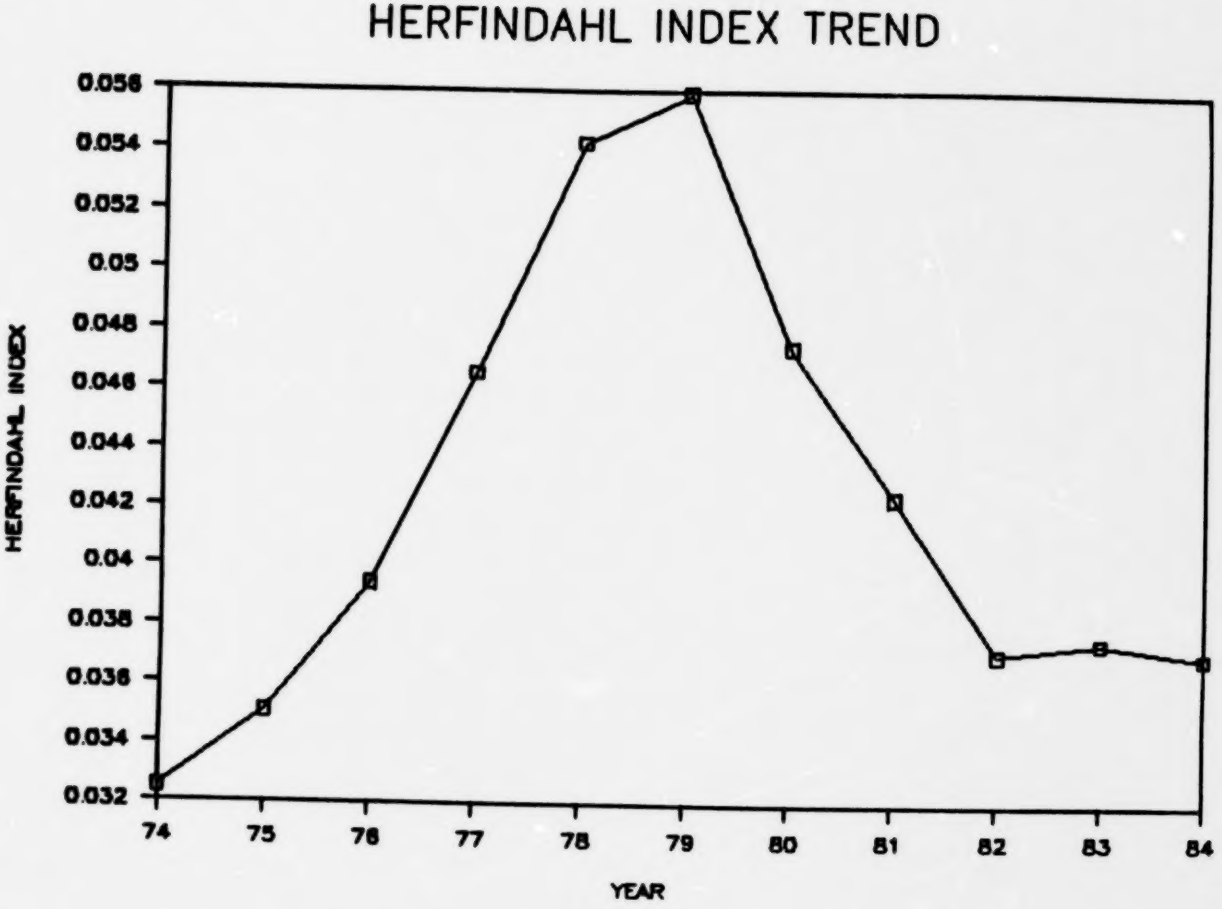


FIGURE 12


HERFINDAHL INDEX TREND
HERFINDAHL INDEX
0.056
0.054
0.052
0.05
0.048
0.046
0.044
0.042
0.04
0.038
0.036
0.034
0.032
74
75
76
77
78
79
80
81
82
83
84
YEAR

According to all four measures of concentration - C4, C8, C20 and H - concentration rose sharply from 1974 to 1979, fell just as rapidly between 1979 and 1982 and stabilized in 1983. For example, C4 peaked 36.89% in 1979, declined to 24.57% in 1982 and increased to 27.82% by 1984. The other measures of concentration behaved in the same way. Of course, these numbers are really only meaningful when measured against some yardstick. For example, the Herfindahl index decreases with increases in the number of firms in the industry and increases with rising inequality among a given number of firms. Furthermore, the Herfindahl index has a value of 1.0 for a monopolistic industry and approaches 0.0 for a perfectly competitive one. Therefore, the Herfindahl index for Ontario automobile insurance shows that:

i) the industry comes close to having a perfectly competitive structure, since $H < 0.06$ over 1974 to 1984; and

ii) inequality among firms in terms of market share increased between 1974 and 1979, and declined between 1979 and 1984.

In general, the concentration ratios show that the automobile insurance industry had roughly the same structure in 1984 as it did in 1974, and that that structure was approximated best by the model of perfect competition.

Figure 13 presents national concentration ratios for selected industries in order to facilitate comparison with the real world, as opposed to theoretical, market structures. Since we are comparing a provincial industry with national industries, it is important to recall the fact that a given industry will usually appear more concentrated as the relevant geographical scope narrows. For example, Canada has many newspapers, while Toronto has but three. However, even taking this bias into account, the Ontario automobile insurance industry appears quite competitive. In particular, 1984 values for C4, C8, C20 and H were lower for the Ontario automobile insurance industry than for the unweighted average of the sample of Canadian industries. In conclusion, the Ontario automobile insurance industry has a competitive market structure. Furthermore, the structure of the auto insurance industry was competitive in 1984 as it was in 1974, and more so than in 1979.

FIGURE 13

Concentration Ratios for Selected Canadian Industries
1980 (except as indicated)

	C4	C8	C20	H
Banking (Assets, 1987)	72.9	91.2	NA	NA
Banking (Loans, 1987)	72.8	92.3	NA	NA
Dairy Products	37.0	50.6	72.7	0.053
Misc. Pharmaceuticals & Resins	27.1	41.5	69.4	0.0361
Childrens' Clothing	21.0	31.9	52.6	0.0221
Pulp & Paper Mills	30.9	49.0	79.3	0.0424
Publishing	40.6	51.1	66.3	0.0541
Iron Foundries	37.8	52.4	75.6	0.065
Machine Shops	6.4	11.8	22.1	0.0042
Motor Vehicle Mfrs.	93.7	98.0	100.0	0.3865
Logging	21.4	33.6	54.6	0.0219
Flour & Breakfast Cereal Mfrs.	66.0	84.7	99.4	0.1261
Rubber Products	56.6	77.2	89.1	0.1087
Plastics Fabricating	10.1	16.6	31.2	0.0079
Boatbuilding	22.4	30.9	48.5	0.0229
Mfrs. of Major Applicances	77.0	90.0	98.3	0.1751
Paint & Varnish Mfrs.	32.6	53.1	78.3	0.0464
Jewellery & Silverware	53.2	60.9	73.8	0.099
Tobacco Products Industry	99.6	100.0	100.0	0.3364
Fish Products Industry	44.7	53.5	67.5	0.0731
Leather Glove Factories	42.0	65.8	96.2	0.0697
Carpet and Rug Mfrs.	48.4	70.0	99.1	0.0835
Average:	43.4	56.3	74.7	0.0918

(Source: Banking: The Canadian Bankers' Association. Financial Statistics, 1987: Second Quarter.

Other: Statistics Canada. Industrial Organization and Concentration in Manufacturing, Mining and Logging Industries. — Ottawa, 1980.)

Market Structure in Reinsurance

The structure of the Canadian auto reinsurance industry is more concentrated than that of the auto insurance industry, however, the reinsurance market still appears to be competitive. In 1986, 38 firms accepted automobile reinsurance in Canada. Figure 14 presents concentration ratios for automobile reinsurance based on net automobile premiums written.

FIGURE 14

Concentration in Canadian Automobile Reinsurance, 1986

C4	46.89
C8	67.59
C20	92.65
H	0.0805

(Source: Canadian Insurance/Agent and Broker Statistics, 1987.)

The value of the Herfindahl index for the automobile reinsurance market is close enough to 0.0, the perfectly competitive benchmark, to support the hypothesis that anti-competitive conduct by reinsurers would be extremely difficult to organize and maintain.

While non-comparable data sets do not allow us to determine net premiums earned in Ontario automobile insurance we can use national automobile insurance data to infer the extent to which small firms were more likely to cede insurance to reinsurers than large firms. In particular, we regress reinsurance ceded on direct premiums written for a sample of 59 companies, dividing both sides of the equation by assets to correct for heteroskedasticity. For the model:

$$RE = a + b \times DPW$$

where RE is reinsurance ceded, DPW is direct premiums written, and a and b are constants, we have reinsurance as a fraction of direct premiums written as:

$$\frac{RE}{DPW} = \frac{a}{DPW} + b.$$

If a is equal to zero, then on average, firms reinsure a constant fraction of direct premiums written. However, if it is greater than zero, then small firms reinsure a higher proportion of direct premiums written than large firms. Figure 15 presents parameter estimates for this regression. For both specifications, we find that the value of the constant terms, a and c, are not significantly different from zero, because the standard errors of these coefficients are large with respect to the magnitudes of the coefficient estimates. On average, all size classes of automobile insurance companies ceded roughly 33% of direct premiums written to reinsurers.

FIGURE 15

Automobile Reinsurance as a Function of Direct Premiums Written

Model 1) $RE = a + bxDPW + e$

Model 2) $\frac{RE}{Assets} = \frac{C}{Assets} + d \ x \ \frac{DPW}{Assets} + u$

Parameter	Estimate	Standard Error
a	-1762	5859
b	0.327	0.0414
c	0.0364	0.0730
d	0.0340	0.0570

R-squared: Model 1) .5150
Model 2) .3726

Sub-Markets for Automobile Insurance

The market share and concentration statistics reported in the previous section are for automobile insurance as a whole, and therefore overstate the degree of competition in the industry. This is because drivers in certain groups do not really have access to all of the companies writing insurance in the province. In particular, the operators of motorcyles, long haul trucks (particularly) to United States destinations), public buses, funeral hearses, ambulances and taxicabs face a restricted choice among insurers, as do high risk category private passenger vehicle operators. Given the limited available data, we could only speculate about concentration in these sub-markets, however, we do have public data on the fractions of these groups insured by the Facility Association. The Facility Association is "an unincorporated non-profit association of insurers ... which provides automobile insurance for owners and operators of motor vehicles who may otherwise have difficulty obtaining such insurance." (Facility Association, Presentation to Task Force on Insurance in Ontario, Toronto, February 1986, from "Notes to Financial Statements"). If a substantial proportion of a particular group insures through the Facility Association, we can tentatively conclude that that group faces a restricted menu of voluntary insurers, since Facility Association clients are usually unable to obtain insurance from any other carrier. Figure 16 reports the Facility Association share of selected Ontario sub-markets.

FIGURE 16

Facility Association Share of Selected Ontario Sub-Markets

(Percent)

By Vehicles Insured	1982	1984	1986
Private Passenger	2.0	1.9	1.7
Farmers	0.5	0.9	0.8
Motorcycles	22.9	20.6	21.6
Snow Vehicles	2.7	8.3	7.2
Commercial	1.9	2.3	3.5

By Premium	1982	1984	1986
Interurban Trucking	5.9	6.2	23.5
Taxicabs	10.8	19.2	46.0
Public Buses	1.7	2.6	15.1
School and Hotel Buses	2.4	2.5	2.3
Funeral and Ambulances	2.6	0.3	10.1
Miscellaneous Public	0.1	2.7	7.8
Garage	1.9	3.8	7.6

(Source: Facility Association)

These statistics highlight potential problems concerning the availability of insurance for taxicabs, interurban trucking, public buses and motorcycles. Furthermore, recourse to the Facility Association has grown dramatically for taxicabs, interurban trucking and public buses between 1982 and 1986. Since these groups appear to belong to very different insurance markets than private passenger vehicles, it is not clear that the high degree of consumer choice and potential competition indicated for Ontario automobile insurance as a whole by the market share and concentration data can be inferred for these sub-markets. Our conclusions about the degree of competition in the industry will be subject to these potential exceptions.

Cost Conditions in Insurance

The cost structure of the automobile insurance industry is important because it has implications for the degree of competition in that industry as well as for the socially optimum industry structure. For example, the presence of scale economies, a situation where for a given range of output, average cost exceeds marginal cost resulting in declining average cost as output rises, creates a barrier to the entry of relatively small companies. Furthermore, if scale economies exist over the entire relevant output range, then the most cost-efficient vehicle for providing services is a regulated monopoly, either privately owned (e.g., Bell Canada) or a Crown Corporation (e.g., Ontario Hydro).

Measurement of cost conditions in the Ontario automobile insurance industry is complicated by two factors. First, we do not have data on output, the number of policies written. In fact, since automobile insurance policies are not directly comparable, it is not clear that this data would be particularly informative. Second, most insurance companies write multiple lines of insurance as shown in Figure 17.

FIGURE 17

Fraction of Groups Writing Multiple Lines of Insurance, 1985

	Percentage of Groups			
Lines Written	Canadian	British	Other	Combined
Auto, Personal and Commercial	82.2	75.0	73.8	78.1
Auto and Personal	16.4	16.7	21.3	18.5
Auto and Commercial				
Auto only	1.4	8.3	4.9	3.4

(Source: Federal Superintendent of Insurance, Report, 1986.)

Since most groups write multiple lines of insurance, it is reasonable to conclude that there is some cost advantage from so doing. For the purposes of this study, the implication is that costs incurred in underwriting one line of insurance may depend on activity in other lines. Consider a situation where a given amount of insurance in two lines, x and y, is to be written. Suppose firm A writes both lines at a total cost of TC_A. One alternative is to have separate firms write the insurance in each line. In particular, let firm B write the given amount in line x, at a total cost of TC_B, and firm C write the given amount in line y, at a total cost of TC_C. If $TC_A < TC_B + TC_C$, then it is cheaper to combine the two lines in one firm. Economists characterize this situation as exhibiting "economies of scope". In general, economies of scope arise when producing several different commodities required shared inputs. Cost allocation in this case is difficult. For example, both passenger and freight trains share the same track, and the cost savings arising from eliminating the duplication of that track are obvious. However, determining the correct cost share of each activity is probably impossible. Our problem is therefore to disentangle the effects of economies of scale and economies of scope in a situation where we can only proxy for output.

Several results from the theoretical literature are useful here (this material is from R. Willig, "Multiproduct Technology and Market Structure," American Economic Review, May 1979, pp. 346-351). For the case of products, 1 and 2, produced in quantities q_1 and q_2 respectively, let $c(q_1,q_2)$ be the total cost of producing q_1 and q_2, $C(q_1,0)$ be the total cost of producing only q_1 and $C(o, q_2)$ be the total cost of producing only q_2. The degree of economies of scope D, is given by:

$$D = \frac{C(q_1,0)+C(0,q_2)-C(q_1,q_2).}{C(q_1q_2)}$$

D is simply the ratio of the cost savings from combining the two activities in one firm to the total cost of producing both goods in one firm. In order to measure the degree of product specific returns to scale, consider first the incremental cost of a product line. Clearly, this is just the extra cost of adding the production of that line to the other outputs of the firm.

Continuing our notation, the average incremental cost of product 1 is:

$$AIC\ (q) = \frac{C(q_1,q_2)-C(0,q_2).}{q_1}$$

The degree of product specific returns to scale for product 1 is therefore:

$$S = \frac{AIC_1(q)}{C_1(q)}$$

where $C_1(q)$ is product 1's marginal cost. This is simply a way of determining whether average cost declines as the output of a particular product rises in a situation where there are economies of scope. If average cost is greater than marginal cost, then the production of one more unit causes average cost to decline, and economies of scale are present. Therefore, in the multiproduct case, there are product specific economies of scale when $s_i>1$, diseconomies when $s_i<1$ and constant returns to scale when $s_i= 1$.

In order to model insurance industry costs, we use a specification which allows us to separate out scale and scope effects. This specification does not allow for interaction effects, which means that it does not allow for the possibility that marginal cost in one line of insurance depends on other lines; however, aside from this restriction, the model is capable of describing any type of cost function. In particular, we specify total cost (TC) as:

$$TC = f+g\ NPE_A+hNPE^2{}_A+jNPE_p+kNPE^2{}_p lNPE_c+mNPE^2{}_c$$

where f-m are constants whose values are to be estimated, NPE_A is net premiums earned in automobile underwriting, NPE_p net premiums earned in personal lines and NPE_c net premiums earned in commercial lines. Since we do not observe the number of policies written, we are forced to use data on net premiums earned. This changes the precise interpretation of our results, but does not bias our conclusions, so long as we are willing to accept the hypothesis that an individual firm's price setting power is minimal. For price-taking firms, our calculated marginal cost is true marginal cost divided by the market price, while calculated average cost is true average cost divided by price. Therefore, these models are capable of correctly testing for declining average cost over a particular output range. For this model:

Marginal cost (auto)	$g + 2hNPE_A$
D_A	$\frac{f}{TC}$
AIC_A	$g + hNPE_A$
S_A	$\frac{g + hNPE_A}{g + 2hNPE_A}.$

The interpretation of these results is straightforward. If the estimate of parameter f is positive, significant and greater than zero, then there are economies of scope. If the estimate of parameter h is significantly less than zero, then there are scale economies in writing automobile insurance.

The regression model we use to fit the parameters through m relies on a number of restrictions in order to produce best linear unbiased estimates with meaningful test statistics (measurements of the significance of those estimates). An important assumption required by our ordinary least squares method is that the variance of the errors in the above regression be independent of the explanatory variables in that equation. There is some evidence that this assumption is violated. In statistical terms, the model suffers from heteroskedasticity. When heteroskedasticity is present, ordinary least squares estimation places more weight on the observations with large error variances than on those with small error variances. The fitted regression line will guarantee a very good approximization in the large variance position of the data. Due to this implicit weighting, ordinary least squares parameter estimates will be inefficient, which means that the variances of the estimated parameters are not the minimum variances. Since we use these variances to construct t-tests for the significance of individual parameters, heteroskedasticity will bias our tests in favour of rejecting the significance of a given parameter. However, parameter estimates will still equal the values of the true parameters. To correct for heteroskedasticity, we use the technique of weighted least squares, which simply divides through each side of the regression equation by some variable related to the variance of the error. In this case, dividing through by total assets solves the problem. Figure 18 presents the results of regression for the model while Figures 19 and 20 plot the errors of these regressions against the independent variables. Data are for 64 firms for the year 1985 (source: Federal Superintendent of Insurance. Report, 1986). Our unit of measurement is thousands of dollars.

To test for economies of scope, we examine the null hypothesis that f=0, while the test for economies of scale considers the null hypothesis that h=0. The appropriate statistic for this type of hypothesis is simply the t-statistic:

$$t = \frac{\text{parameter estimate}}{\text{standard error}}.$$

For the result of the heteroskedasticity adjusted model, we have:

$$t_f = -0.302.$$

$$t_h = 0.230.$$

Even at the 25% significance level, t=.677 (approximately) for this sample size. Hence, we cannot reject the null hypotheses that f=0, h=0. This implies that we cannot reject the hypothesis that insurance underwriting is not subject to economies of scope, or the hypothesis that auto insurance underwriting is not subject to economies of scale. In other words, we find that in auto insurance underwriting, small firms are not, on average, at a cost disadvantge vis-a-vis large firms.

FIGURE 18

Scale Economies Regressions

Model: $TC = f+gNPE_A+hNPE^2{}_A+jNPE_p+kNPE^2+lNPE_c+mNPE^2{}_c+v$

Parameter	Value	Standard Error
f	4,601	3,416
g	1.1478	.2001
h	$8.762\text{x}10^{-7}$	$6.978\text{x}10^{-7}$
j	1.7761	.5723
k	$-1.102\text{x}10^{-5}$	$6.237\text{x}10^{-6}$
l	1.0280	.4435
m	$1.918\text{x}10^{-5}$	$7.677\text{x}10^{-4}$

Sample Size = 64
Corrected R^2 = .9764
F = 435.37

Model Adjusted:

$$\frac{TC}{Assets} = \frac{f}{Assets} + g^* \frac{NPE_A}{Assets} + h^* \frac{NPE_A^2}{Assets} + j^* \frac{NPE_p}{Assets}$$

$$+ k^* \frac{NPE_p^2}{Assets} + l^* \frac{NPE_c}{Assets} + m^* \frac{NPE_c^2}{Assets} + v$$

Parameter	Value	Standard Error
f	-99.25	328.2
g	1.219	.08434
h	$3.542\text{x}10^{-7}$	$1.538\text{x}10^{-6}$
j	1.434	.02382
k	$-9.193\text{x}10^{-6}$	$1.281\text{x}10^{-5}$
l	1.179	.03726
m	$1.545\text{x}10^{-5}$	$2.040\text{x}10^{-6}$

Sample Size = 64
Corrected R^2 = .9899
F = 684.37

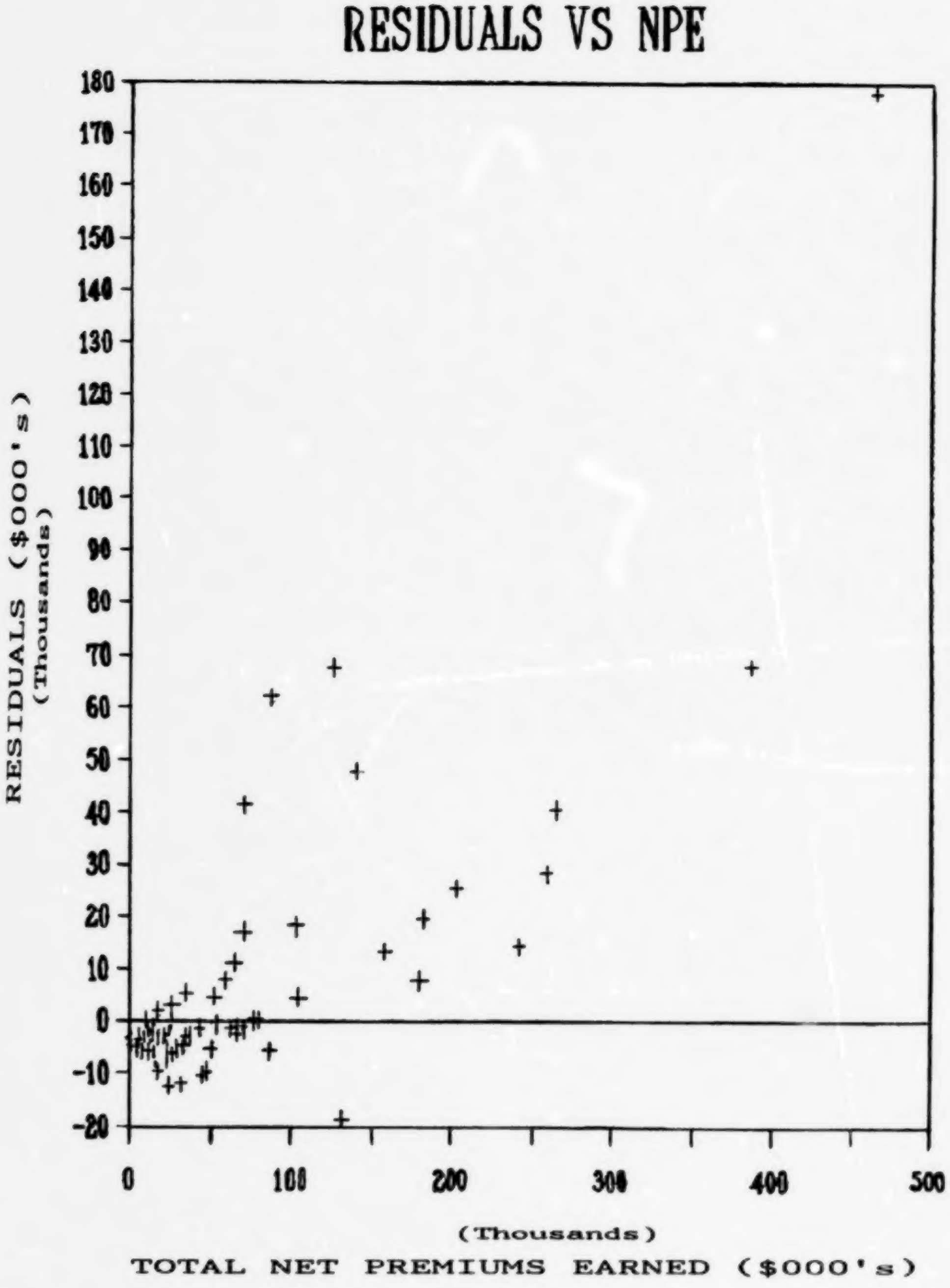

RESIDUALS VS NPE
RESIDUALS ($000's)
(Thousands)
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
0
100
200
300
400
500
(Thousands)
TOTAL NET PREMIUMS EARNED ($000's)

FIGURE 19

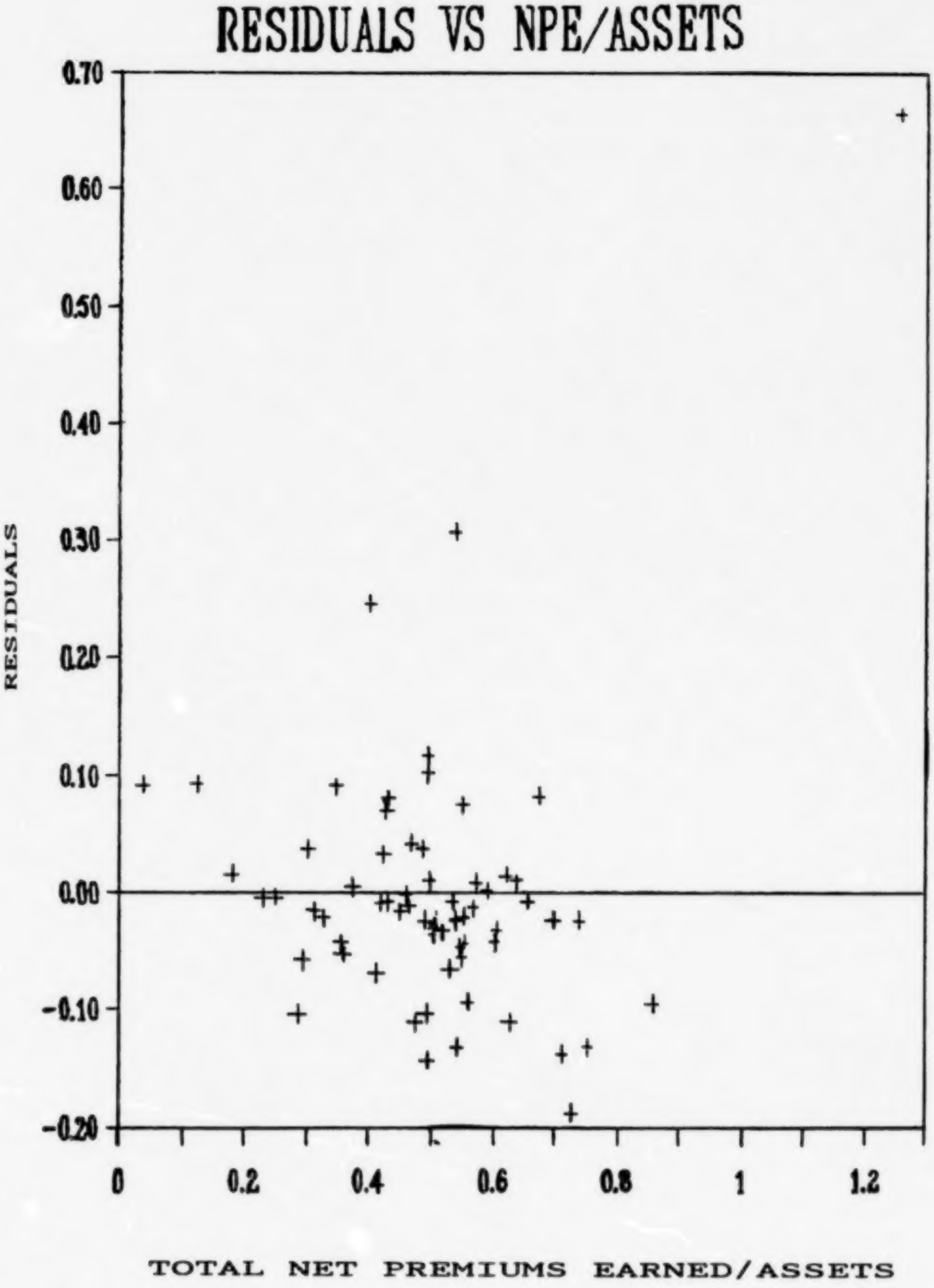

RESIDUALS VS NPE/ASSETS
RESIDUALS
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
-0.10
-0.20
0
0.2
0.4
0.6
0.8
1
1.2
TOTAL NET PREMIUMS EARNED/ASSETS

FIGURE 20

Other Entry Barriers

Absent any cost or product differentiation-based barriers to entry, government regulation may serve to inhibit entry into the insurance industry by conferring advantages on incumbent firms, or simply making entry more costly than necessary. Insurance underwriters are required by the provincial Insurance Act to maintain total capital and surplus of at least $1,000,000 or more at the discretion of the Minister of Consumer and Commercial Relations. Of this amount, $500,000 must be paid in capital, while $250,000 must be unimpaired surplus. Underwriters must also deposit approved securities with the Minister worth $25,000 if they operate in the Ontario market only, and $50,000 if they operate in other jurisdictions as well as Ontario. Furthermore, the federal Department of Insurance requires that every $3.00 of premium written by a company must be supported by $1.00 of capital.

There is no evidence to suggest that these requirements inhibit entry into the industry. First, these regulations apply equally to incumbent firms and potential entrants. Second, the federal regulation concerning the ratio of premiums to capital has an equal effect on all sizes of company, for it requires larger companies to raise more capital than smaller ones. Finally, the minimum amounts of capital required by the Province seem easily supported by the Canadian capital markets, although this assertion is based on judgment rather than on hard data.

FIGURE 21

Entry and Exit in Ontario Automobile Insurance, 1975 to 1984

Year	Number of Firms	Average DPW,* Current Year	Number of Firms	Average DPW,* Previous Year
1975	5	$ 295	12	$ 959
1976	5	680	16	1,212
1977	5	5,706	13	1,723
1978	11	506	6	598
1979	6	107	5	357
1980	8	1,156	9	46
1981	11	1,103	3	2,905
1982	3	4,900	7	2,447
1983	6	650	12	560
1984	7	10	4	121
Average	6.7	1,511	8.7	1,093
Standard Deviation	2.6	2,042	4.4	981

*DPW = Direct Premium Written ($000) by Group

(Source: Superintendent of Insurance for Ontario. Annual Reports. - Toronto, 1974 to 1986.)

Entry and Exit in Ontario Automobile Insurance

A more direct test of whether barriers to entry exist in automobile insurance is simply an examination of the entry and exit experience of the industry. Figure 21 gives the number of firms entering and leaving the Ontario industry over the period 1974 to 1984. Entry is defined as the appearance of a group in the Ontario Superintendent's report which did not write any business in the previous year's report. Exit is defined as the disappearance from the report of a group which did write business in the previous year.

The industry's entry and exit experience for 1975 to 1984 shows that companies did not face barriers to entry or exit, since over that period, 67 groups entered while

87 left, producing a net loss of 20 groups. This data suggests that the scale economies under which firms operate have been insufficient to deter entry into the industry. While at the group level, entrants were 38% larger than exiters between 1975 and 1984, the standard deviation of average direct premiums written was over twice as large for entrants as for firms leaving the industry. Furthermore, the relatively small size of the entrants confirms our finding that auto insurance is not characterized by economies of scale.

The Insurers Advisory Organization

The Insurers Advisory Organization (IAO) publishes recommended rates for automobile insurance based on the formula that for every $1.00 of premium income, $0.72 should be allocated to claims settlements and increases in reserves, and $0.28 should be taken up by operating expenses and taxes. There is no mechanism which forces insurance companies to actually charge these recommended rates. The existence of an organization which recommends prices might seem anti-competitive. For example, we do not observe a (hypothetical) Supermarket Advisory Organization publishing recommended prices for food items. However, IAO membership is voluntary, and only approximately half of the companies writing auto insurance in Ontario belong (source: IAO). It is possible that the IAO could facilitate implicit collusion among insurers by giving them a mechanism to coordinate their pricing policies. However, it is unlikely that the IAO serves this function. Even if the industry or a group of firms in the industry attempted to use the IAO to coordinate their prices, there appears to be no industry mechanism for punishing firms which cheat on IAO recommendations. This means that if the IAO were to set its recommended prices above costs so that firms charging IAO prices could earn supernormal profits, it would always pay any firm to discount from those prices. By discounting a little, the cheater would gain market share, thereby increasing its profits. Since all firms would have an incentive to cheat, IAO prices set above costs would not be sustainable. It is therefore unlikely that the IAO facilitates implicit collusion among insurers.

Insurance Brokers and Agents

Automobile insurance companies market their product either directly, using their own agents, or through insurance brokers who sell insurance for several different companies. In effect, insurance brokers retail insurance for the companies, earning an average commission of approximately 11.5% of premium (based on Insurance Bureau of Canada: 1985 Expense Allocation Program, agency and acquisition costs). In Ontario, insurance brokers are governed by the Registered Insurance Brokers Act, which gives the Registered Insurance Brokers of Ontario (RIBO) the power to interpret and administer the rules of the Act. Insurance brokers and brokerage companies are not allowed to be involved in second businesses unless RIBO deems the other business to be appropriate. For example, automobile dealers would be prohibited from offering insurance brokerage services to their clients. Furthermore, part-time employees are not allowed to act as insurance brokers.

Brokerage companies are also subject to regulation. In particular, the majority of a brokerage company's shares must be held by registered insurance intermediaries, although this restriction does not apply to corporations where the proportion of shares not held by registered intermediaries has not increased since October 1, 1981, or corporations which were listed on a Canadian stock exchange prior to October 1, 1981. Firms are required to carry errors and omissions insurance of at least $500,000 and fidelity of at least $100,000. Finally, sales promotions by brokers are restricted.

These regulations clearly confer significant economic benefit on insurance brokers. Potential competitors such as trust companies and automobile dealers are prohibited from competing in offering insurance. Part-time employees are also prohibited from competing with full-time brokers. New brokerage firms are prohibited from using promotions to inform the public of their existence. Post-1981 brokerage firms are denied some of the flexibility in raising capital enjoyed by pre-1981 brokerages. The effect of these regulations is to limit the extent of competition in automobile insurance brokerage by restricting entry and constraining the behaviour of entrants. The relevant question for public policy is whether the Province ought to limit competition in the brokerage business.

The usual rationale for allowing self-governing professions to prohibit certain forms of competition is that professional regulations are necessary to ensure quality which, a priori, may be impossible for consumers to measure. For example, a lay person cannot judge the quality of a physician before, and perhaps even after, being treated. One could argue that comparison of that physician's record of success with those of other physicians indicates quality, but this type of policing would come at the expense of allowing incompetent doctors to practise until their reputations forced them out of the market. Along with self-government on quality, professions are usually allowed to restrict competition in ways that would be illegal for most businesses. For example, it would have been impossible for individual doctors to advertise their prices during the period of extra-billing in Ontario.

In effect, the Registered Insurance Brokers Act allows brokers to behave like a self-governing profession rather than an ordinary business. The Act appears to shelter brokerage firms and individual brokers from competition, to their probable economic benefit, and to the potential detriment of consumers.

Conclusions

This study has examined the structure of the Ontario automobile insurance industry using standard results and techniques from the field of industrial economics. We have also briefly examined the insurance brokerage market. Based on our examination of market structure, we conclude that the Ontario automobile insurance industry is competitive, in the sense that economists use the term. We do not find evidence that economies of scale or economies of scope were significant. Furthermore, substantial entry by relatively small firms over the period 1975 to 1984 implies that the industry is not protected by entry barriers. Therefore, we find no structural evidence to support the claim that insurance companies are earning supernormal profits. Indeed, the net exit from the industry over the period 1974 to 1984 suggests that risk adjusted automobile insurance industry profitability may have been sub-normal, in the economic sense of that term. We also conclude that the structure of the automobile reinsurance market is reasonably close to the stylized model of perfect competition. We do find legal barriers to entry in the insurance brokerage industry, based on some of the provisions of the Registered Insurance Brokers Act. We question whether the entry deterring provisions of the Act are necessary to ensure consumer welfare.

APPENDIX 1: INTERPRETING THE MARKET SHARE REGRESSION

Part of our analysis of changes in market shares over time used regression coefficients to determine whether larger than average firms tended to gain or lose shares. Quirin et al. (1974, pp. 48-49) derive the interpretation for the regression coefficients, which we reproduce here.

We are concerned with the regression:

$$som(i,t) = A+B*som(i,t-j),$$

where som(i,t-j) is the market share of firm i at time t, while A and B are constants. Define s(i,t) as som(i,t)-AVG, where AVG is the average market share at time t. The ordinary least squares estimator of B, B, is defined as:

$$B = \frac{\mathop{R}\limits_{i=1}^{N} s(i,t)*s(i,t-j)}{\mathop{R}\limits_{i=1}^{N} s(i,t,-j)^{2}}$$

(assuming there are N firms in the industry). Quirin et al. prove that this estimator can be rewritten as:

$$B = 1 + \mathop{R}\limits_{i=1}^{N} \frac{s(i,t-j)^{2}}{\mathop{R}\limits_{i=1}^{N} s(i,t-j)^{2}} * \frac{(i,t)-s(i,-j)}{s(i,t-j)}$$

squared deviation. Quirin et al. state: "Since there are a large number of firms in the industry, the average [squared deviation] will be small [so that] this factor will weight the impact of the larger companies more heavily. This weight is always positive." The second term will be positive, implying that the estimate of B will be greater than 1.0, when:

i) s(i,t-j)>0 and s(i,t)>s(i,t-j)
ii) s(i,t-j)<0 and s(i,t)<s(i,t-j).

The first condition says that for a large company, which implies that s(i,t-j)>0, B is greater than 1.0 whenever that firm increased its market share. The second condition says that for a smaller than average company, B is greater than 1.0 whenever that firm's market share declined.

Since the number of firms is large, the weights are much higher for the large firms, which means that we can infer that the change in large firm market shares was approximately one minus the estimated value of B.

HISTORICAL DEVELOPMENT OF REGULATION IN THE UNITED STATES

An opinion prepared for the Inquiry Into Motor
Vehicle Accident Compensation in Ontario

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Chairman of Commercial
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September 1987

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HISTORICAL DEVELOPMENT OF REGULATION IN THE UNITED STATES

As in a number of other forms of economic regulation, Massachusetts appears as the innovator among the United States with an 1818 statute requiring the filing of insurance companies' annual financial statements with the state comptroller.[1] While this constituted a reporting requirement additional to that imposed on other corporations, its basic purpose seems to have been purely fiscal, to permit the determination of liability for state taxes. By 1837, this limited fiscal objective became an attempt to influence economic performance, as companies were required to establish reserves and to maintain a fund which would ensure their ability to carry out their contractual obligations.[2] The motivating factor in this initiative seems to have been the New York fire of 1835 which destroyed 700 buildings and bankrupted most of the fire insurance companies in business in that state.

Boards of Commissioners of Insurance were established in New Hampshire (1851), Massachusetts (1852) and a number of other states shortly thereafter. These were replaced or supplemented by the establishment of full-time insurance departments in Massachusetts (1855), New York (1860) and elsewhere.[3] A legal challenge to this exercise of state regulatory jurisdiction was rejected in 1869 on the ground that it did not interfere with interstate commerce because insurance was not commerce.[4] The state supervision of insurance was established at about this time only in the more sophisticated jurisdictions; only 17 states had insurance commissioners by 1890 and most of those had settled back to review annual reports and process licence applications. The major concern of regulators was solvency; the Chicago fire of 1871 led to claims in excess of $100 million and bankrupted 68 of the 302 fire insurance companies involved. A major fire in Boston the next year produced claims of $50 million and put another 25 insurers out of business. Improved rating systems installed by rating agencies in the wake of these disasters made the fire insurance business profitable by the latter part of the century.[5]

Concern over a variety of dubious practices in the insurance industry led to the appointment, in New York, of the Armstrong Committee, which proposed a variety of reforms in the life insurance industry in 1906, and the Merritt Committee which did the same for the fire and casualty business in 1911. As a consequence of these proposals, New York regulation was tightened considerably. Because of the importance of New York as a financial centre, as well as because of its importance as an insurance market, most companies had to meet the new New York standards and these became de facto national standards in the decades that followed. New York's enforcement applied to all companies doing business in that state, enabled most states to rely on New York's initiatives in this area so that in many states such rate regulation as existed was often pro forma, and simply accepted the proposals put forward by the rating bureaus involved. Rather more attention was paid to the review and examination of annual financial statements filed with the Commission. These were allocated among Commissioners in the various states for review by a committee of the National Association of Insurance Commissioners.[6]

The depression of the 1930s brought with it a number of complaints about insurance companies and their practices. In particular, questions were raised about the rate-fixing activities of the rating bureaus which had been given a quasi-official status under the Merritt reforms. This in turn led to an antitrust action against the Southeastern Underwriters Association. On an appeal on the question of jurisdiction, the U.S. Supreme Court ruled that insurance was commerce and that federal antitrust statutes applied to the industry.[7] The industry lobbied intensively to have regulatory jurisdiction returned to the states, and in 1945 the McCarran-Ferguson Act was passed, exempting from federal antitrust laws any company whose rates in a state were effectively regulated by the regulatory authorities of that state.

Substantially all of the states moved to establish state regulation as a consequence of the federal 'threat' and the insistent lobbying efforts of the companies. Current regulatory bodies and the basic thrusts of rate regulation are the outcome of these moves; actual practice has changed, in varying degrees, over the four decades since present regulatory structures were established.

BASIC PROVISIONS FOUND IN INSURANCE REGULATION

Economic regulation of the insurance industry as applied to fire and casualty insurance (including automobile in the several jurisdictions of North America consists of some or all of the following provisions:

(a) Controls Over Entry

Most jurisdictions require that a company wishing to do business in the jurisdiction be licensed or 'admitted', and prohibit agents from placing business with non-admitted insurers unless the risk has been offered to admitted insurers within the jurisdiction and turned down. The term 'surplus lines' is used to describe such insurance placed with non-admitted companies. A further provision in most jurisdictions restricts the placing of reinsurance with non-admitted insurers by requiring insurers ceding such reinsurance to continue to show full liability for unexpired premiums, etc. on their own financial statements, while requiring expensing of premiums paid to reinsurers. Agents are also subject to state licensing requirements.

In Canada, entry is subject to dual controls by federal and provincial superintendents. Licensing by the former entitles a company to do business within Canada; provincial licensing admits to a single province. Nothing prevents a provincially-licensed company, however, from obtaining provincial licences in a number of provinces, thus avoiding federal jurisdiction. Most have not bothered to do so; federal regulation is regarded as innocuous.

(b) Reporting Requirements

Annual financial statements in an approved form are required to be filed with the regulatory authorities in all jurisdictions. These are required to be computed using specified systems of accounts which depart, in several notable respects, from the Generally Accepted Accounting Principles which apply to most industries. No such principles have yet been established for insurers although the Canadian Institute of Chartered Accountants has moved to accept statement-based accounts.

(c) Loss Experience Reporting

Nearly all jurisdictions require the reporting of claims experience on a claim-by-claim basis, as their existence becomes known, to a designated statistical agency which compiles and reports aggregate loss experience and exposures for its member companies. The basic purpose of reporting is to forecast losses on an exposure-related basis in order to establish premium rates. For accounting purposes, it is also accessory (sic) to estimate Incurred But Not Reported (IBNR) losses; this usually involves use of loss development factors developed by the statistical agency or rating bureau. In most United States jurisdictions, there are two statistical agents which are regional organizations performing the agency function on behalf of stock and mutual companies respectively. Most of these bodies also serve as rating bureaus. In the latter capacity, they perform actuarial analyses of loss experience, project losses and set or recommend rates for their members. Their function is discussed below. In Canada, a single agency, the Insurance Bureau of Canada, performs the statistical agent function but does not act as a rating bureau.

In most of the United States a company may belong to a rating bureau for statistical agency purposes but not for ratemaking purposes.

(d) Financial Examination

Annual statements are examined by insurance commissions staff but are not audited. In the United States, the examination function for a given company is allocated by the National Association of Insurance Commissioners (NAIC) to one of its members. In Canada, this function is performed for federally-licensed companies (i.e., those licensed under the *Canadian and British Insurance Act* or the *Foreign Insurance Companies Act*) by the staff of the federal superintendent of insurance, while provincially-licensed companies are inspected by the respective provincial superintendents.

(e) Standardization of Policy Provisions and Terms

This regulatory requirement plays an important role in facilitating competition; it ensures that the formal contract of one company is the same as that of a competitor. It is also important in the actuarial context, since the frequency and severity of losses experienced by one carrier would be quite different from that of another if there were significant differences in their contractual obligations.

This being said, it should also be noted that premature uniformity here can be as stifling to progress as premature standardization anywhere. It is at least likely that the availability of uninsured motorist coverage was delayed in most parts of Canada by the adoption of a standard policy in which it was not provided. Some jurisdictions permit, others do not, the addition of extra coverages beyond those available in the basic policy and its approved variations.

It should also be noted that while the standardization of the contract undoubtedly reduces differences in loss frequency and severity, the claim management practices of individual insurers may increase them. One company may be much faster to accept liability than another and may choose to settle claims another would fight, for marketing-related or other reasons.

Standardization with respect to policy terms goes well beyond the individual jurisdiction level. Both the NAIC and its Canadian counterpart, an association of superintendents, function as uniformity commissioners and recommend standard or 'model' policy terms to their membership. Official policy forms in most jurisdictions adhere closely to the recommended standards.

(f) Rate Regulation

In most U.S. jurisdictions and in four Canadian ones (five, if proposed controls in Ontario are adopted) the actual premium rates charged by companies within the jurisdiction are fixed for at least one type of coverage. In some cases, rates are set for individual companies. Usually, rating bureaus function as agents and propose rates which are set for the membership of the rating bureau as a group. Individual companies may deviate from the group rates under conditions which are still widely variable from state to state. In general, the terms on which individual companies may deviate from bureau rates have been eased considerably over the past two decades.[8]

(g) Licensing and Regulation of Agents

No insurers of consequence deal directly with new customers. All use an agent as a middleman. The agent interviews the client and helps her/him determine appropriate coverages, taking into account risk exposures and economic circumstances. Almost as important, but not a contractual part of the agent's job, is the provision of good offices to resolve conflicts between the insured and the company when a potential claim situation arises. Most insureds expect their agent to bring pressure on the company for a favourable settlement; most agents perform in this capacity and are assisted in doing so because of the nature of their relationship with the companies they represent.

Most companies in Canada and the United States market their product under a set of contractual provisions known as the American Agency System (AAS) under which agents represent several companies and the customer is the customer of the agent, not the company, so that renewal business may be placed with the present insurer or another chosen by the agent who is said to 'own' the renewals.[9] A small number of companies, several of them very large (e.g., Allstate, State Farm, GEIC) do not adhere to the AAS but use exclusive agents and deal directly with insureds on a renewal business. These are known as 'direct writers.'

All agents must, in most jurisdictions, be licensed. Licensing usually involves a credit check and related measures to exclude the obviously criminal and the clearly insolvent. This precaution is necessary because customers, at least under the AAS, pay the agent and not the company. The simpler forms of insurance fraud, in which the agent simply decamps after collecting the premium, are presumably discouraged in this manner.

Most jurisdictions further require the would-be agent to pass an examination of a technical nature which ensures that the agent will have the knowledge to advise the insured in respect of the coverages he/she should purchase.

An equivalent requirement to ensure that he/she uses it has yet to be found.

Once licensed, an agent may have his/her licence revoked for a number of offenses including the failure to remit clients' premiums and the violation of the rules on surplus-line insurance.

(h) Licensing and Regulation of Adjusters

Most claims are settled without recourse to lawyers and on a basis mutually satisfactory to claimant, company and insured, through the efforts of claims adjusters who may work for a given party (i.e., the company) or may be independents retained by either party to negotiate a settlement. Most jurisdictions license adjusters and regulate their activities in a manner analogous to the regulation of agents.

(i) Regulating Access

North American insurers do not follow the British practice of providing coverage to all comers, perhaps at a variable price. Instead, individual companies retain the right to accept or reject a given risk. In order that no individual will be rendered unable to obtain auto insurance, which is in certain circumstances compulsory in most U.S. and all Canadian jurisdictions, a variety of expedients have been adopted, ranging from Assigned Risk Plans, in which individual risks rejected by one company are assigned to a company chosen at random under the supervision of the local regulator, to all-industry pools such as the Ontario 'Facility' which will accept rejected risks and share them on a basis agreeable to all participants. Operation of these plans has generated a significant volume of criticism, since the rates charged to the substandard risks which regulate such plans are higher than the usual rates charged 'clean' risks. It must be noted, however, that nearly all such plans are operated at a loss despite the higher premiums.

(j) Ombudsman Roles

Most insurance commissions or superintendents of insurance play an important 'good offices' role which is not, strictly speaking, regulatory nor is it provided for by statute. This role is one of handling complaints by insureds, by third party claimants, and by individuals having difficulty in achieving either status, and of applying moral suasion (backed by the undoubted ability of the superintendent (commissioner) to make easy things difficult) to ensure that legitimate complaints are taken care of without needless resort to litigation. At the same time, the superintendent (commissioner) may be able to explain insurance practices and the limits to the responsibility of insurers, and the reasons therefor, to those whose complains seem frivolous, vexatious or otherwise groundless.

Not all of these functions are performed by regulators in all jurisdictions. In particular, not all regulate rates, nor do those who do so regulate them in the same way with the same results.

We should also note a major difference between Canadian and United States regulation. United States regulation was, prior to 1944, predicated on the belief that insurance was not commerce, or if commerce, not interstate. While that belief was dashed in 1944 in the Southeastern Underwriters Association case, subsequent federal legislation has left the field to the state regulators. In Canada, a basic federal presence was established almost immediately; provincial regulation has been accepted to the extent that it does not conflict with federal initiatives (Citizens Insurance Co. v. Parsons (1881), 7 App. Cas. 96). A basic division of labour has resulted in which provincial agencies regulate policy terms, collect loss experience, license and examine provincial companies, agents and adjusters, operate assigned risk plans or supervise substitutes, act as ombudsmen and apply such rate regulation as exists. The federal superintendent admits and examines companies licensed to do business Canada-wide and concerns himself largely with solvency issues.

THE FUNCTIONS OF RATING BUREAUS

Rating bureaus, as a form of institution, antedate the introduction of effective rate regulation in most jurisdictions. Indeed, rating bureaus, in their heyday, provided rate regulation under private auspices using a variety of devices familiar to students of cartels. They gathered loss experience, processed it to yield premium rates, and in some cases enforced the application of the proposed rates by auditing all policies issued by member companies. A variety of sanctions were used to punish violators.

With the advent of regulation, much of the enforcement role of the rating bureaus was passed to official regulatory agencies. Bureaus continued to function as statistical agents, as standardizers of policy terms, and as setters of rates, though the latter had to be officially accepted by the regulators. Punishment of violators was turned over to the state regulators. During most of the period prior to about 1965-70, and in most jurisdictions, performance of state regulators is well described by the Stigler 'regulatory capture' model.[10]

Under state regulation, most rating bureaus have continued to function, performing the statistical agency function. The activities of most, particularly in the United States, go beyond the collection and analysis of loss data and extend to the development of proposed premium rates for their membership to apply. It is this price-fixing activity of bureaus that led to the South-eastern Underwriters prosecution under the Sherman Act and which has provided a safe harbour if done under state regulatory control by the McCarran-Ferguson Act.

It should be noted that there are technical reasons why the premium fixing process and the actuarial analysis of loss experience are difficult to separate. The loss-ratio method of analysis, which is widely used, requires existing premium rates as an input and produces proposed premiums incorporating the desired loss ratio. It does not produce pure premiums (i.e., loss costs stripped of any allowance for expenses and underwriting profit) though the resulting proposed premiums can be adjusted with relative ease to yield pure premiums. In addition, rating bureaus/statistical agents control the definitions of categories for which loss experience is collected and reported. This is important because it makes it difficult for insurers to collect enough data to set credible premiums for classes which are not recognized by the agency. This has been an important factor limiting the extent of rate deviations and the evolution of rate structures in all jurisdictions. In Canada, merit rating schemes under which rates are tied to loss experience have been widely used for decades; the introduction of such schemes in U.S. jurisdictions has been a slow and not always successful process. Bureaus may not only recommend rates to their members, they have also frequently appeared before insurance commissioners to oppose the approval of deviated rates. This was a much more frequent practice in the 1950s and 1960s than it is today.

TYPES OF RATE REGULATION

Most students of rate regulation categorize individual jurisdictions into one of the following broad categories insofar as their basic regulatory methodologies are concerned:

(1) File and use jurisdictions

(2) Prior approval jurisdictions

(3) Market competitions

'FILE-AND-USE' REGULATION

As the name implies, this system of regulation permits companies to put proposed rate changes into effect, either immediately upon filing with the regulatory agency or after a short waiting period. The former is more usual. Rate filings are substantially the same in content to filings made under prior approval systems and include actuarial analyses of past losses, projections of future losses and evidence to support the loading for expenses and underwriting profit. Companies seeking to deviate from the rates filed by their rating bureaus may file and use deviated rates, but must be prepared to produce actuarial evidence (or cost accounting evidence related to expenses) to support them.

While in certain respects more informal, the 'file-and-use' procedure permits the regulatory body to review the evidence before it in a more leisurely fashion than is usually the case in a 'prior approval' jurisdiction because there is no pressure to approve rates in a hurry in order to meet an implementation deadline. While there is nothing to prevent some prior approval regulators from taking as much time as they need, doing so may cut into underwriting profits and may shrink capacity as insurers move into more favourable jurisdictions. Others must approve or reject within a specified number of days after filing. If this is not done, the proposed rates go into effect automatically.

Of course it is possible that subsequent investigation of a filed and implemented rate may result in a finding that the rate is excessive. If so, it may be reduced and/or rebates of the excessive amount ordered. This rarely happens because the basic yardsticks used by most of the regulatory agencies, here and in prior approved jurisdictions, accept formulas which are indistinguishable from those used by the rating bureaus, i.e., the sum of actuarially-expected loss costs, adjusted for trend and inflation, plus operating expenses and an allowance for underwriting profit. There should be little room for argument about the magnitude of these items, except perhaps the trend-inflation adjustment.

In practice, adjustments to filed and implemented rates are unusual. The spread of file and use systems has been, in our judgment, as in that of others,[11] an important factor in the enhancement of competitive forces in the industry. While this is partly due to the system itself, it is also due to the relatively greater freedom to offer deviated or competitive rates that it makes possible. Other things being equal, it is much easier for other members of a rating bureau to oppose one member's deviations from yet unapproved rates with any degree of success. By the time the rate can be attacked in a file--and-use regulatory venue, it will probably have been copied by so many competitors that even victory becomes irrelevant in a competitive context.

'PRIOR APPROVAL' REGULATION

'Prior approval' regulation conforms to the classical model in which the companies propose rates to the regulatory body which examines their appropriateness and determines whether or not they may be used. Companies, or more usually rating bureaus on behalf of their member companies, file proposed rates together with actual and projected exposures and loss experience, operating expense experience and projected expense ratios. In most jurisdictions proposed rates flow directly from the projected losses plus expenses and incorporate a standard allowance for underwriting profits. Hearings are held to consider this evidence and any evidence filed by intervenors who object to the proposed rates. With appropriate modifications, the rates are then approved and allowed to go into effect.

Similar procedures are used for deviated rates, i.e., rates which differ from those proposed by the rating bureaus. Usually, such rates must be based on expense rate difference between the applicant and other rating bureau members. Deviated rates based on claims experience, often for a single class of insured, must perforce be based on the statistical experience of that company alone, since no data for the subdivided class are obtainable from the rating bureau. Such rates, based on a single company's experience, are often objected to on credibility grounds, i.e., arguments that one's company's experience does not provide an adequate sample size on which to base rates. Most statutes require that rates not be "unfairly discriminatory." As usually interpreted, this means that premium differences based on proven (i.e., statistically supported) loss cost differences are acceptable, but those for which such proof is lacking are not.

Deviated rates have become significantly more common in both prior approval and file-and-use jurisdictions than they were in the 1940s or 1950s; this is probably in response to market forces that are not officially recognized in the regulatory process.

'MARKET COMPETITION' REGULATION

This brand of regulation may be distinguished from 'file-and-use' by virtue of the fact that there is no formal approval of the rates. Participants in the market may or may not file rates and loss experience, but file financial reports. The regulatory agency does not approve rates but may monitor rates in the several markets under its control closely seeking to identify those markets, if any, in which market competition is not producing rates approximating marginal costs. Where it is, markets are left alone as the best protection of the customer. Where it is not, the regulator may intervene. The regulator may have residual rate setting powers which may be brought into play, or it may increase competition by permitting brokers to place insurance in non-admitted markets.

The basic premise of this regulatory model is that competition is the best regulator of prices where it is permitted to operate, and that intervention in the process is justified only in those cases where for one reason or another there is no competition. California is the best-known state using a market competition regulatory model; others are Missouri and Idaho. Illinois has deregulated completely and does not intervene at all in the auto insurance market. One aspect of the open competition model is that insurers are able to set compensatory rates for all classes of insured, and that companies have less need to 'dump' individuals into assigned market plans. Only 1.9% of Californians insured were in an assigned risk plan in 1974 as compared with 3.7% nationally, and 10% in New Jersey. The latter operates a stringent prior approval model.[12] California does, however, have a serious uninsured motorist problem, with 15% - 20% of vehicles uninsured.[13] New York adopted 'open competition' in 1970, but has moved back to a prior approval model.

CONTROL OF PROFITS

Most rating bureaus use, and most regulatory agencies accept, provisions for underwriting profit which are customary in origin and bear no observable relation to the rates of return required to attract investment into the industry. This rather cursory treatment of allowable profits is the most outstanding difference between price regulation in the insurance market and that found in traditionally-regulated public utilities.

These allowed mark-up rates ignore investment income, and, to the extent that the latter is significant, generate total profitability significantly in excess of the target rates, providing of course that the allowed mark-up is earned. Concern over the handling of investment income in the regulatory process has been a matter of continuing debate for 30 years or more. Adherence to the customary formulae reflects the complexity of the issues involved, the concern of regulators with the need to provide a continually expanding market for coverage and their concern lest a tougher policy on investment income generate a capacity crisis in their jurisdiction. Some efforts have been made to capture some of the excess profits generated by the conventional mark-ups, as in New York's recently introduced 'flexirate'.

Conventional mark-ups in Canada have been 2.5% of premium while in most U.S. jurisdictions a 5% allowance has been customary (others use 3.5% or 2.5%). These are applied to projected loss costs plus expenses. Loss experience suggests that the full mark-ups are seldom earned. Thus would appear that companies or rating bureaus adjust trend projections in the actuarial process to recognize 'market factors' or competition. The result is to establish rates which generate mark-ups more in line with market earnings requirements. Studies of insurance profits suggest that overall profits are related to the riskiness of the insurance portfolio[14] and that they are related to the level of availability of investment earnings.[15] Theoretical considerations suggest that if prospective earnings on prepaid premiums are high enough, insurers do not need any underwriting profits and can in fact absorb continuous underwriting losses (of predictable magnitude).[16]

CANADIAN REGULATORY EXPERIENCE

Generally speaking, the insurance regulation process in Canada stops short of regulating premium rates. In effect, and for most categories of insurance, the result is indistinguishable from the 'open competition' regulatory model existing in California. Companies do file rates with provincial insurance departments to keep the latter informed even where there is no formal obligation to file, and actuarial data developed by industry organizations, which act as statistical agents on behalf of the superintendents, are also filed on a regular basis.

This pattern of laissez faire control does not extend to automobile insurance. In four provinces, private insurers have been displaced, at least from the market for basic coverages, by provincially-owned monopoly carriers. In four others, more formal rate regulation, confined to auto insurance rates, has been established by statute.

In Nova Scotia, a 'file-and-use' system was established by an amendment to the Provincial Insurance Act in 1960 [7 Eliz. II, c. 21, s. 32] and 1964 [11 Eliz., II c. 9, s. 108(2)]. These provide for approval or rejection of filed rates by the Provincial Utilities Commission. The Acts provide that if filed rates are not rejected within a short period, they go into effect automatically.

The corresponding Alberta statute, passed in the 1970s [R.S.A. 1980, c. I-5, s. 337f] sets up a prior approval regulatory scheme administered by a separate agency, the Automobile Insurance Board.

It is virtually impossible to describe the regulatory processes applied by these agencies, which are largely intuitive in character. Both agencies receive a great deal of statistical input from the statistical agent (The Insurance Bureau of Canada), the major rating bureau (The Insurance Advisory Organization) and other sources, together with proposed schedules of rates. From time to time, consultants have been engaged to assist the agencies in their interpretation of the data. In Nova Scotia, the body charged with applying regulation is the Board of Public Utilities Commissioners, a body which is well-experienced in applying conventional types of regulation to investor-owned public utilities in the province. It has had jurisdiction over insurance since 1960.

The PUC, early on, developed an understanding of the loss cost statistics which underlie the rate-making process. It did not have, and does not have, comparable data on operating expenses nor on underwriting profits. We note that while expense data on a national basis are scarce in Canada, such data on a provincial basis are either non-existent, or are the result of so many essentially arbitrary allocations of expenses incurred elsewhere that it may be pointless to seek them.

Parenthetically it should be noted that there is an even worse overhead allocation problem involved in estimating expenses by state in the U.S., and that the allocation process is one which tends to produce relatively uniform expense loadings across the country.

What the Nova Scotia Board has done is see to it that rates proposed for Nova Scotia do not discriminate on a provincial basis but reflect loss experience in that province. This represents, perhaps as realistic an approach as is possible.

While Alberta has set up a separate regulatory agency and imposed a prior approval format on its deliberations, the process has been, if anything, less formal than in the case in Nova Scotia. The criteria applied and the results obtained have been approximately the same.

Basic concerns of the regulators in both jurisdictions have been twofold: to ensure that average rate levels are 'appropriate' and to ensure that rate differentials are cost-justified. Even so, there have been claims that the rates for under-25 males are 'discriminatory' by Charter of Rights standards, if not in terms of the relevant Insurance Acts, and the Alberta Board has permitted the use of age/sex-based differentials on a year-by-year basis until a more appropriate basis can be found. Somewhat similar systems exist in New Brunswick and Prince Edward Island. Both operate within the same data base limitations as have already been noted in Alberta and Nova Scotia.

Viewed from nearby, auto rate regulation as practised in the Canadian regulatory process seems sloppy and inefficient in comparison with, for example, the regulation applied to utilities and pipelines. A similar observation could probably be made about actual regulatory practice in all but a few U.S. jurisdictions. Such a comparison is ill-founded, for competition in the marketplace for insurance provides an independent regulator of rates which is totally absent in the utility/pipeline case but which has operated quite effectively in the market for auto insurance and which has forced companies to lower expense rates and to pass on the savings in spite of regulation pressures which have often been exercised in the opposite direction. While data problems may preclude a more sophisticated approach to regulation, even the now thoroughgoing regulation appears to be a poor substitution for competition.

PERSPECTIVE

While the California open competition regulatory model has been in effect since 1947, the predominant pattern of regulation adopted in the United States in the wake of the passage of the McCarran-Ferguson Act conformed fairly closely to the prior approval model. Statutes of this type, conforming to a model bill drafted by the National Association of Insurance Commissioners, were passed by 44 states.[17] At least initially, any deviation from the rates promulgated by rating bureaus also required prior approval and had in some cases to be renewed annually. As an example of the extent to which prior approval regulation strengthened the control of rating bureaus over price, we note that in New York, in 1967, some 22.6% of automobile liability insurance was written at deviated rates, the rest at rates set by the bureaus. In contrast, in California, in 1966, 49.9% of automobile liability premiums were written at off-bureau rates.[18]

During the 1960s and 1970s, a number of states moved from prior approval to file and use or to the open competition model. New York adopted the latter in 1970; Illinois the year before.[19] A file-and-use model was recommended by the Senate Subcommittee on Antitrust and Monopoly in 1961 and adopted for the District of Columbia in 1962. While some 2/3 of the states retained prior approval status as of the mid-1970s, many had effectively emasculated them by the adoption of procedures allowing deviated rates to go into effect without prior approval, reserving the latter requirement for basic bureau rates.[20]

Much of this activity appears to have anticipated the trend toward deregulation in the United States; since the later 1970s there has been pressure for more regulation in a number of jurisdictions. It arose largely out of the problems experienced with product liability, medical malpractice and other general liability lines, in which sharp escalation in rates and attempts by insurers to reduce exposure created a major affordability and availability problem in a number of jurisdictions.

The most important jurisdiction moving to re-regulate insurance is New York, which introduced an excess profits plan for automobile lines in 1982, requiring the refund to insureds of earnings in excess of a permitted book rate of return on net worth which is 3% in excess of an indicated rate of return found by regressing book rates of return on risk and growth variables. Subject to this provision, insurers are free to set their rates alone or through a rating bureau.

A new elaborate form of regulation was adopted in 1986 for commercial lines. Labelled 'flex-rating', the system permits changes within a fairly narrow band (10% to 30%) on a file and use basis; changes beyond these limits are available only on a prior approval basis. The apparent objective of this system is not to impose any limit on rates but to discourage sudden large premium increases and to force more attention to long-term trends.

These systems are so new that there is not much experience with them; a further complication in attempting to evaluate their impact is the impact of New York's tort law reforms in 1972 and 1978 which have severely restricted access to damages for non-economic loss (usually pain and suffering).

Much of the pressure for renewed regulation on auto insurance in the United States comes, as it does in Canada, as the result of a series of sharp increases in premium rates. These have come about because insurers have misestimated the trend in loss costs during periods of accelerating inflation and have been forced, in order to preserve solvency, to raise rates at a rate in excess of the rate of inflation, just as a rider who has missed a bus must run faster than the bus if he/she is to catch it in the next block. The problem has been exacerbated in most North American jurisdictions by the fact that court judgments which influence claim costs have risen faster than inflation. This is a problem which regulation cannot solve.

There were two major studies of insurance regulation published in the 1970s, Paul Joskow of M.I.T., writing in 1973, concluded:

(1) Prior approval rate regulation should be eliminated and replaced with a no-filing

> system allowing insurance prices to be determined competitively...
>
> (8) Attempts by some states to go toward more price regulation rather than less should be vigorously discouraged...
>
> There are very few examples of deregulation in the history of regulation in the United States. Here is an example, however, of a situation in which regulation has worked to the benefit of almost no one (except perhaps the direct writers) in the last fifteen years...
>
> ...Those states which have eliminated formal rate regulation should be congratulated and other states encouraged to follow their examples.[21]

The second study, by Paul MacAvoy, on loan from Yale to the Council of Economic Advisors, concluded:

> The evidence strongly suggests that unrestricted price competition is superior to rigid rate regulation as a way of achieving reasonable prices, a reliable insurance mechanism and economically fair prices which are based on an accurate assessment of the risk presented.[22]

Several additional studies by Hill[23] and by Frech and Samprone[24] found, as did Joskow and MacAvoy, that premium rates and/or profits were higher in states with regulation. Another study by Ippolito[25] claims that the hypothesis of higher rates in regulated states is not borne out by the facts he examines. His analysis is limited to 10 states, to some 30 companies and to quoted rates for a sample of hypothetical drivers. His regression analysis does find that rate levels are strongly positively related to the proportion of the population covered by assigned risk plans. This proportion is known to be higher in states with prior approval regulation. This variable is therefore collinear with the variable whose influence is being tested and appears to have accounted for much of the effect that would otherwise be attributed to regulation.

A more recent study, dealing with experience from 1973-85, is that completed by the U.S. General Accounting Office.[26] This study purports to show that insurance is less costly in regulated states than in more competitive jurisdictions. The latter category, as defined for the study, includes all firms of file-and-use jurisdictions so that the 'regulated' category includes prior approval jurisdictions only.

Two measures of cost are used - an average premium per vehicle calculation and the inverse loss ratio, i.e., the amount of premium collected per dollar of claims paid. Average premiums may differ from one locality to another for a variety of reasons, most important of which are differences in the risk composition of the local insured population. There are significant differences between states in the proposition of under-25 drivers, in that of drivers over 70, and these are not corrected for the study.[27] Further differences are due to differences in coverages purchased and in the extent to which the automobile claims system is of a no-fault character. The latter is considered in the analysis, but the failure to consider the other factors render the comparisons on an average premium basis essentially worthless.

The other comparison, based on inverse loss ratios, is less obviously error-ridden than the average premium comparison. However, unless all risk classes have the same loss ratios in all jurisdictions, changes in the risk mix will also affect the reported loss ratio and its inverse. Most actuarial schemes set rates which are intended *a priori* to produce equal loss ratios for all the classes they cover; in fact such equality is rarely attained.

The average data show an inverse loss rate of 1.49 for so-called competitive rating states; 1.47 for those regulated on a prior approval basis.[28] However, this difference is more than explained by the differences in the percentage of motorists covered on a voluntary basis and those covered under assigned risk and similar plans - 6.7% in regulated jurisdictions, nearer 1.1% in competitive ones.[29] In competitive rating states the inverse loss ratio is 1.393, in prior approval states it is lower at 1.256.[30] Table 1 shows a computation of the inverse loss ratio for the two groups, assuming an inverse loss ratio of 1.5 for voluntary risks in both types of jurisdiction, and using reported loss ratios for assigned risks.

TABLE 1

Computation of Estimated Average Inverse Loss Ratios, as Affected by Voluntary Risk Coverage and Loss Experience of Assigned Risk Plans, U.S. 1973-85

Competitive Jurisdiction	Share of Market		Inverse Loss Ratio		Weighted ILR	
Voluntary Risks	.989	x	1.50*	=	1.484	
Assigned Risks	.011	x	1.393	=	.015	
Average					1.499	1.50
Regulated Jurisdiction						
Voluntary Risks	.9233	x	1.509	=	1.385	
Assigned Risks	.0767		1.256	=	.096	
Average					1.481	1.48

*assumed

Table 1 indicates that a difference in the computed loss ratio in favour of the regulated jurisdictions in an amount equal to that reported in the study could be explained by these factors alone. The system as a whole loses money on assigned risk insureds; consequently, the evidence that insurance is cheaper in regulated jurisdictions proves nothing beyond the obvious fact that larger subsidies can produce lower prices.

Nor is the assigned risk plan evidence the only factor explaining the differences. Loss ratios can be higher, and inverse loss ratios lower, in no-fault jurisdictions where claim adjustment expenses can be reduced to trivial levels, than it is in the jurisdictions where liability is based on negligence. There are more no-fault states in the regulated group.

A number of other comparisons are made in the study; its piece de résistance is a statistical regression analysis which we regard as defective because it is linear and treats a number of risk-modifying variables as if these were additive, whereas the differential complexes used in most actuarial studies treat them, correctly in our view, as multiplicative. The average premium regressions are suspect for the reasons given. The regression on inverse loss ratios explains 17% of observed differences for liability insurances, 2% of that for liability. The only variables to have statistically significant variables were the existence of no-fault liability, a compulsory liability coverage variable and a term representing the interaction of prior approval regulation with the degree of urbanization. None is more significant in the physical damage case.

In short, the study's evidence does not support the conclusion it has drawn from the regressions.

The preponderance of the empirical evidence from the United States supports the view that regulation increases costs to consumers; the results of those few studies with contrary findings are easily explicable in terms of defects in statistical methodology.

Our review suggests that there is no reason to believe that experience with regulation in Canada would be more favourable. Existing regulation in two provinces is of a passive-submissive variety which tells little or nothing about the likely outcome of regulation which imposed a constraint on underwriting profits, more severe than that imposed by market competition.

Ontario's experience with rent control is of some relevance here; its major impact has been to reduce the supply of new rental housing to the vanishing point. There has been no immediate deterioration in the apparent quantity because the assets regulated are immobile. Insurance companies' assets are not immobile and a system of price controls which reduced returns as severely as rent review would not only inhibit additions to supply, but could encourage a withdrawal of existing capacity. Regulation on the existing U.S. pattern does not adversely affect supply; the evidence is that it guarantees profit margins at the expense of the consumers.

It is concluded that if regulation is to be imposed in Ontario it should be of the open competition variety in effect in California. As a next best, a file-and-use model could be imposed. No economic case can be made for more stringent regulation. Indeed, there is a strong case against it based on the likelihood of increased rates or an adverse supply response.

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CONSTITUTIONAL AUTHORITY TO ENACT NO-FAULT AUTOMOBILE ACCIDENT INSURANCE SCHEME

An opinion prepared for the Inquiry Into Motor Vehicle Accident Compensation in Ontario

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CONSTITUTIONAL AUTHORITY TO ENACT NO-FAULT AUTOMOBILE ACCIDENT INSURANCE SCHEME

THE OPINION REQUESTED

I have been requested by the Commission of Inquiry into Motor Vehicle Accident Compensation in Ontario to provide an opinion on the question whether the Charter of Rights imposes constitutional restrictions on the power of a provincial Legislature to enact a 'no-fault' system of compensation for injuries arising out of automobile accidents.

The Inquiry was established by the Government of Ontario, by Order in Council (O.C. 2962/86), on November 6, 1986. The sole Commissioner is the Honourable Mr. Justice Coulter A. Osborne, a Judge of the Supreme Court of Ontario. The terms of reference, as stipulated by the Order in Council, are "to inquire into and report ... on the tort system of compensation for injury by automobile accident and the consequences of the implementation of a no-fault automobile accident insurance scheme".

A precursor of the Inquiry was the Ontario Task Force on Insurance, chaired by Dr. David Slater, which was critical of the tort system as a means of providing compensation for accidents, and which recommended a further inquiry into automobile accidents in particular. The Final Report of the Ontario Task Force on Insurance (Ministry of Financial Institutions, Ontario, May 1986) is referred to in several places in this opinion as the "Slater Report".

The Inquiry has received a Submission, dated March 10, 1987, from a Committee of the Canadian Bar Association - Ontario (hereafter "the C.B.A.-O. opinion"), that the introduction of a no-fault system would violate ss. 7 and 15 of the Charter of Rights and could not be justified under s. 1. The Inquiry has also received a Submission, dated April 23, 1987, from the Insurance Bureau of Canada, which includes as Appendix 4 an opinion, dated April 21, 1987, by Neil Finkelstein, entitled "The Constitutionality of Provincial Legislation Promulgating the Insurance Bureau of Canada's Proposed Modified No-Fault Automobile Insurance Plan" (hereafter, "the Finkelstein opinion"), which argues that there is no constitutional impediment to the introduction of a no-fault scheme along the lines proposed by the Insurance Bureau in its Submission. In the opinion that follows, I will make reference to both the C.B.A.-O. opinion and the Finkelstein opinion. In general, I do not find the arguments presented in the C.B.A.-O. opinion to be persuasive, and I prefer the arguments presented in the Finkelstein opinion.

My conclusions are set out in detail at the end of this opinion, but my general conclusion is that there are no constitutional restrictions on the power of a provincial Legislature to enact a no-fault system of compensation for injuries arising out of automobile accidents.

NO-FAULT AUTOMOBILE ACCIDENT INSURANCE

At the time of writing, the Inquiry is still in its early stages, and no decisions have been taken, even tentatively, as to the Inquiry's recommendations. I have no idea whether the Inquiry will recommend a no-fault system of compensation for automobile accidents, and, if it does so recommend, what form the recommended system would take. Accordingly, in this part of the opinion, I shall simply sketch out briefly what I assume to be the rationale and general characteristics of a no-fault system, identifying those elements that could be subjected to constitutional attack. Needless to say, if the ultimate recommendations depart radically from my assumptions, this opinion would need to be reviewed.

The rationale for a no-fault system of automobile insurance is to correct deficiencies in the tort (negligence) system. Under the tort system, the victim of an automobile accident is compensated only if the accident was caused by someone else's negligence. A victim of an automobile accident who cannot establish negligence is uncompensated. The Slater Report concluded that more than 50% of automobile accident victims receive no compensation through the tort system: Slater Report, 55.

Negligence must be proved, and proof is expensive, involving as it does the use of lawyers, insurance adjusters and other experts, all of whom are entitled to be paid. The Slater Report concluded that more than 50 cents of each premium dollar is absorbed by the administrative and legal costs (transaction costs) of the tort-insurance system; the transaction costs of no-fault systems were only 10 to 20 cents of each dollar: Slater Report, 66.

Proof of negligence in a congested court system often involves serious delays. Thus, even the winners in the tort system - those who succeed in recovering full damages - may have to endure several years of uncompensated uncertainty. If a no-fault system worked properly, there would be no reason for delay in the award of compensation, and benefits could be paid promptly: Slater Report, 65-66.

The advantages of a no-fault system are that:

(a) all automobile accident victims would be compensated, regardless of whose fault caused the accident;

(b) the transaction costs would be much reduced, thereby freeing resources for the extended coverage; and

(c) compensation would be certain, speedy and predictable in amount.

The disadvantages of a no-fault system are that:

(a) the system may be less effective in deterring bad driving; and

(b) the level of compensation may be set at a level below common-law damages.

Ontario has already taken several steps in the direction of a no-fault system. Since 1980, all owners of automobiles have been required by statute to take out a standard insurance policy, which includes a minimum of $200,000 of third party insurance. This standard insurance policy indemnifies whomever is driving the insured automobile against tort liability to third parties. The policy thus relieves the driver of financial responsibility for his/her negligence, except in the case where damages exceed the amount of the insurance.

The mandatory standard insurance policy also contains, in Section B, provision for modest no-fault benefits for personal injury arising out of the use of the insured automobile. These benefits are payable to the driver of the insured vehicle, passengers in the insured vehicle and pedestrians injured by the insured vehicle. Thus, Ontario has a no-fault system now. However, the level of benefits is so low that it does not discourage resort to the tort system by those victims who believe that they can prove negligence: Slater Report, 76-77. If the Section B benefits were improved, there would be less resort to the tort system.

A no-fault system could provide benefits equal to common-law damages in tort. However, this opinion will assume that a no-fault system would provide a level of benefits below common-law damages.

A no-fault system could exist side-by-side with the tort system, as is now the case with the Section B benefits. Under such an add-on system, a victim would not be deprived of the right to sue in tort, and the victim would presumably exercise that right if he or she believed that more damages than the no-fault benefits could be recovered through the tort system.

A no-fault system could wholly replace the tort system. This has been the case in Ontario since 1914 with respect to industrial accidents. Workers' compensation provides no-fault benefits for employees injured at work. Their tort action has been taken away by statute so that the high transaction costs of the tort action are removed from the system. Quebec has followed this model for automobile accidents as well. Quebec has a no-fault system and no tort action.

A no-fault system could partially replace the tort system. Many American states have introduced 'threshold' no-fault systems for automobile accidents. In these systems, the tort action is abolished for cases that do not reach a statutory threshold, which in some states is defined by a monetary figure, and in others by a verbal formula. Under a threshold system, the common-law right of action is retained for the most serious injuries - those that exceed the threshold.

The constitutional attack by the C.B.A.-O. opinion assumes a system of no-fault automobile insurance that:

(a) provides benefits less than common-law damages; and

(b) deprives some or all victims of the tort action.

In such a system, the victim of an automobile accident who can prove negligence is arguably worse off than he or she would have been in the tort system. I say "arguably" because the speed, certainty and predictability of no-fault benefits might make the no-fault alternative more attractive to some potential plaintiffs. My opinion will consider the constitutionality of a system with the aforementioned two characteristics, that is, the provision of benefits less than common-law damages and the complete or partial abrogation of the tort action.

DISTRIBUTION OF POWERS

The Constitution Act, 1867, by s. 92(13), confers on the provincial Legislatures the power to make laws in relation to "property and civil rights in the province". It is well settled that this head of power extends to the regulation of insurance, including automobile insurance: Canadian Indemnity Co. v. A.-G. B.C., [1977] 2 S.C.R. 504. It is also well settled that this head of power extends to the law of torts, including the creation, modification or abrogation of causes of action: MacDonald v. Vapor Canada, [1977] 2 S.C.R. 174. It is clear, therefore, that in the Canadian federal system it is the provincial Legislatures and not the federal Parliament that possess the power to enact a legal regime of no-fault automobile insurance and the power to restrict or abolish the action in tort for automobile-related losses.

SECTION 96 OF THE CONSTITUTION ACT, 1867

Quebec has a no-fault automobile insurance plan which denies the tort action to accident victims. In Tardif v. Berube (1986), 34 D.L.R. (4th) 24 (Que. S.C.), the Quebec plan was attacked on the basis that automobile accident victims were denied recourse to the courts, since claims under the plan were adjudicated by the board that administered the plan, the Régie de l'assurance automobile du Québec. The attack was based on s. 96 of the Constitution Act, 1867, which by implication stipulates that functions traditionally exercised by superior courts may not be transferred to administrative tribunals.

Gervais, J. rejected the s. 96 argument, holding that the administration of a no-fault insurance plan was so different from the administration of a fault-based tort system that there was no analogy to the traditional functions of a superior court. He pointed out that non-curial systems for adjudication of workers' compensation claims existed in every province and had always survived s. 96 attack, the leading case being Farrell v. Workmen's Compensation Board, [1961] S.C.R. 48.

The decision in Tardif v. Berube, although only rendered at the trial level, is so plainly correct that I will say no more about this issue, except to note that the C.B.A.-O. opinion does not argue that s. 96 is a ground of invalidity of a no-fault plan.

My conclusion is that, if the province were to establish a no-fault insurance plan for automobile accidents, the adjudication of claims under the plan could be entrusted to an administrative tribunal outside the ordinary courts, as has been done in all provinces for workers' compensation.

SECTION 7 OF THE CHARTER

Text of s. 7

Section 7 of the Charter provides as follows:

> Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.

'Liberty' and 'Security of the Person'

The first question to be considered under s. 7 is whether the right to sue in tort comes within the words 'liberty' or 'security of the person' in s. 7. If it does, and if the right is taken away in violation of the principles of fundamental justice, then a breach of s. 7 would occur.

At this stage in the evolution of the Charter, there is no settled definition of liberty or security of the person and many different definitions have been propounded. I have reviewed all the cases, but I see no point in describing them here. It seems to me to be unlikely that the Supreme Court of Canada would decide that a cause of action in tort which has not yet accrued is within the words liberty or security of the person. That amounts to saying that everyone has a legitimate and constitutionally-protected expectation that the common law will not be changed to his or her detriment in the future. That is a profoundly conservative reinforcement of the status quo which in my view would not be accepted by the Supreme Court of Canada.

My conclusion does not depend upon my view of the meaning of liberty and security of the person. As I shall explain in the next section of this opinion, in my view a no-fault insurance scheme could not violate s. 7, because it would not be a breach of the principles of fundamental justice.

Fundamental Justice

If I am wrong and liberty or security of the person does include the right to sue in tort, a breach of s. 7 will occur only if the right has been taken away in violation of "the principles of fundamental justice".

In Re s. 94(2) of the Motor Vehicle Act, [1985] 2 S.C.R. 486, the Supreme Court of Canada held that fundamental justice was not merely a procedural concept, and that it was violated by a criminal offence of absolute liability under which an innocent person could be convicted and imprisoned. Lamer, J. for the majority said (at p. 503) that the principles of fundamental justice "are to be found in the basic tenets of our legal system". The more specific rights in ss. 8 to 14 of the Charter provided "an invaluable key" to what those basic tenets were. The principle that an innocent person ought not to be liable to conviction and imprisonment was a principle of fundamental justice.

I do not think that it can plausibly be argued that the replacement of tort liability with a no-fault insurance scheme violates principles of fundamental justice. There is nothing in ss. 8 to 14 of the Charter that implies that civil liability must always be premised on fault. The common law itself imposes civil liability on a no-fault basis in many situations (e.g., breach of contract, carrier, innkeeper, Rylands v. Fletcher), but most notably in the law of negligence itself, where the employer's vicarious liability for the torts of his employees is a no-fault liability. In the case of automobile accidents, compulsory third party insurance has severely weakened the idea of fault as a basis for tortious liability, since the effect of insurance is to relieve the at-fault driver from liability. I have no doubt, therefore, that the substitution of a no-fault insurance plan for the present tort system would not be held to be a breach of fundamental justice.

Policy

Since the denial of the tort action would not be a breach of s. 7 of the Charter, it is not necessary to ask whether a no-fault insurance scheme provides anything in return for the loss of the valuable right to sue in tort. But, if this question is asked, it must be remembered that a no-fault scheme would operate only prospectively. It would not take away causes of action that have already accrued. The no-fault scheme, on its introduction, would therefore apply to every individual who has not yet been involved in an accident and who is at risk of being (1) the victim of an accident in which fault can be established, (2) the victim of an accident in which fault cannot be established, and (3) the at-fault cause of an accident in which a victim is injured. The introduction of the no-fault scheme arguably diminishes each individual's rights under risk (1), above (although even this is unclear in view of the speedier, more certain benefits of a no-fault scheme), but the no-fault scheme enhances each individual's rights under risks (2) and (3), above. What a no-fault scheme would provide is comprehensive insurance coverage against all the risks associated with the use of automobiles. That is a benefit that is valuable to every individual. Whether it is preferable to the tort action as a response to automobile accidents is a matter of policy upon which people are bound to disagree. However, I am certain that the Supreme Court of Canada would decide that the Legislature is entitled to choose the no-fault alternative, just as I believe the Court would uphold workers' compensation. These are policy choices that do not implicate fundamental civil libertarian values, and certainly not values protected by the Charter of Rights.

American Case-Law

In the United States, the fourteenth amendment provides that "nor shall any State deprive any person of life, liberty or property, without due process of law". (The fifth amendment includes a similar clause binding on the federal government.) The due process clause, which is the analogue of s. 7 of the Charter, has been interpreted by the Supreme Court of the United States as not protecting the continuance of common-law causes of action.

In New York Central Railroad Co. v. White (1917), 243 U.S. 188, the Court upheld New York's workers' compensation law, which imposed no-fault liability on employers to compensate injured employees at a rate lower than common-law damages; the tort action for negligence was abolished. The Court pointed out that no-fault liability was not unusual, both under statute and at common law. It was not a denial of the due process clause to replace fault liability with no-fault liability. "No person", the Court said (at p. 198), "has a vested interest in any rule of law entitling him to insist that it shall remain unchanged for his benefit". This sweeping affirmation of legislative power to alter common-law negligence principles was repeated two years later in the Arizona Employers' Liability Cases (1918), 250 U.S. 400, where other workers' compensation laws were upheld.

In Duke Power Co. v. Carolina Environmental Study Group (1978), 438 U.S. 59, the Court upheld a federal statute that abolished tort liability and substituted no-fault liability with limited benefits for nuclear accidents. Burger, C.J. for the Court referred to the workers' compensation cases and said (at p. 88) that "it is not clear at all that the Due Process clause in fact requires that a legislatively enacted compensation scheme either duplicate the recovery at common law or provide a reasonable substitute remedy". However, in any event, he held that despite the limited benefits, the no-fault plan did "provide a reasonably just substitute for the common-law or state tort law remedies it replaces".

Many American states have enacted no-fault automobile insurance schemes coupled with restrictions on tort actions. None of these schemes has yet been considered by the Supreme Court of the United States, but there has been extensive litigation in the state courts and constitutional challenges have generally been unsuccessful. The cases are comprehensively reviewed in Josephine Y. King, "Constitutionality of No Fault Jurisprudence", [1983] Utah L. Rev. 797. An earlier article is George J. Siedel, "The Constitutionality of No-Fault Insurance: The Courts Speak" (1976-77), 26 Drake L. Rev. 794. The U.S. cases are also reviewed in Appendix D of the Finkelstein opinion. They are not referred to in the C.B.A.-O. opinion.

Conclusion on s. 7

The American case-law under the due process clause powerfully reinforces my opinion that the replacement of the tort remedy by a no-fault insurance plan for automobile accidents would not be a breach of s. 7 of the Charter. The constitutional position would be exactly the same as that of workers' compensation, which in my opinion is also not a breach of s. 7.

SECTION 15 OF THE CHARTER

Text of s. 15

Section 15(1) of the Charter provides as follows:

> Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

Discrimination

The argument that s. 15 would be infringed by a no-fault insurance system for automobile accidents is that the victims of automobile accidents would be treated differently than the victims of other kinds of accidents. For those victims who are unable to prove fault, the treatment would clearly be superior, thus constituting discrimination against non-automobile accident victims. For those victims who are able to prove fault, the treatment would arguably be inferior, thus constituting discrimination against automobile accident victims.

The grounds of discrimination enumerated in s. 15 do not include fortuitous matters such as the cause of an accident. However, it is plain from s. 15 that the enumerated grounds are not exhaustive, and that other distinctions could be offensive to s. 15. It is also plain that not every legislative distinction is a violation of the Charter of Rights, because nearly all statutes would fall on that basis. What has not yet been clarified by the Canadian courts is what kinds of non-enumerated distinctions are forbidden by s. 15. Also unclear is the extent to which an inquiry into the justification for a distinction takes place within s. 15 itself or under s. 1.

The controversies over the meaning of s. 15 are reported in my book Constitutional Law of Canada (2nd ed., 1985), 798-801, where I suggest that all legislative distinctions are violations of s. 15 and have to be justified under s. 1. This view is a minority one, the more general view being that some standard of reasonableness is implicit within s. 15 itself. All of the courts that have found it necessary to choose between these two approaches have chosen the latter approach. The leading case is Re Andrews and Law Society of B.C. (1986), 27 D.L.R. (4th) 600 (B.C.C.A.), where the British Columbia Court of Appeal held that the citizenship requirement for admission to the Bar of British Columbia was contrary to s. 15 of the Charter. McLachlin, J.A. for the Court held that s. 15 did not condemn all legislative distinctions, only those that were not "reasonable or fair". The test under s. 15, she held (at p. 609), was "whether the impugned distinction is reasonable or fair, having regard to the purposes and aims [of the legislation] and its effect on persons adversely affected". Only if legislation failed this test would s. 1 become relevant, and in exceptional circumstances discriminatory legislation might still be held to be justified under s. 1. In the Andrews case itself, she held that the citizenship requirement failed the "reasonable or fair" test under s. 15, as well as the tests for justification under s. 1.

The weight of authority is clearly in favour of an approach akin to that taken in the Andrews case, and I now think that this approach (or something like it) will be adopted by the Supreme Court of Canada. This opinion will proceed on that assumption. However, my conclusion does not depend upon that assumption. As I shall explain in the next section of this opinion, in my view a no-fault insurance scheme could be justified under s. 1.

Application to Automobile Accidents

The test applied in the Andrews case was "whether the impugned distinction is reasonable or fair, having regard to the purposes and aims [of the legislation] and its effect on persons adversely affected". Would a no-fault insurance scheme, applicable only to automobile accidents, satisfy this test (or something like it)? In my opinion, the answer is clearly yes.

In considering whether there is a reasonable and fair justification for the distinctive treatment of automobile accident victims, it is relevant to notice that the law of Ontario and the other Canadian provinces already makes important distinctions between different classes of accident victims, all of whom are arguably equally in need of compensation. Even the common law itself denies (or used to deny) compensation to those who cannot prove fault, as well as to those who are caught by the *volenti* doctrine, the contributory negligence doctrine (before reform) or the fellow-servant doctrine (before repeal).

Dissatisfaction with the incomplete coverage of the common law has led in every Canadian province to the replacement of the common law tort system with no-fault liability for industrial accidents. These schemes of workers' compensation have introduced a further distinction into the law, namely, between those victims injured at work and those injured elsewhere. However, the justification was, and remains, that employers should pay for all of the injuries caused by their business activity, not just those in which negligence could be proved. The employer could and should treat the cost of providing no-fault benefits as a cost of doing business which would enter into the price of the product and thus be indirectly paid for by the consumers of the product. The removal of the tort action was necessary to remove the high transaction costs from the system so as to enable each dollar of the workers' compensation premium to purchase as much compensation as possible.

A very similar rationale can be applied to automobile accidents. Owners of vehicles in Ontario are already singled out for special treatment in that, as explained earlier, they are obliged to purchase a standard insurance policy which includes third party coverage and modest first party no-fault coverage. Victims of automobile accidents, unlike victims of other accidents, benefit from the existence of this compulsory insurance. It is only a short step to the proposition that car owners and others who benefit from the roads ought to compensate for all of the injuries that, statistics show, will inevitably be produced by this dangerous activity. A policy decision to enrich the compensation payable to all by denying the tort action to those who can prove fault could be justified on the same basis as it can be justified in the case of workers' compensation.

I conclude that the owners of automobiles form a class of people who benefit from a uniquely dangerous activity, and who may be required to buy no-fault insurance as a condition of vehicle registration. The nature of that insurance scheme is a matter of policy for the Legislature, but I have no doubt that it could include the abolition of the tort action.

It is possible to design an accident compensation system that treats all victims alike. No claim of discrimination could be made against a system like that of New Zealand which has universal application. But it is surely 'reasonable' and 'fair' for reform to proceed in stages. Employers create risks against which they can carry insurance: that fact justifies the distinctive treatment of industrial accidents. Car owners also create risks against which they can carry insurance: that fact justifies the distinctive treatment of automobile accidents. Outside these two classes (which include most of society's accidents) it is not easy to identify the persons who should buy the insurance, and so compensation for accidents in the home or during recreation require a more radical approach. I cannot imagine that the Supreme Court of Canada would insist that only a universal system of no-fault insurance could satisfy s. 15 of the Charter. In my view, the rationale for a system confined to automobile accidents is so plain that a court would hold that the special treatment of automobile accidents was 'reasonable and fair' having regard to the purposes and aims of the no-fault system, and accepting that some victims would receive lower compensation under such a system.

I conclude that a system of no-fault insurance for automobile accidents would not infringe s. 15 of the Charter.

The Piercey, Streng and Kask Cases

The C.B.A.-O. opinion (at pp. 45-47) relied on three decisions of trial courts - Piercey, Streng and Kask - to support its argument that a scheme of no-fault automobile insurance would violate s. 15 of the Charter.

Only one of the three cases - Piercey - is at all close to the present issue. It does support the C.B.A.-O. position, and is inconsistent with my opinion. The case is Piercey v. General Bakeries (1986), 31 D.L.R. (4th) 373 (Nfld. T.D.). In that case, Hickman, C.J. of the Trial Division of the Supreme Court of Newfoundland held that the denial of the tort action in Newfoundland's workers' compensation statute was a violation of s. 15 of the Charter. Indeed, he went so far as to say (at p. 387) that the denial of the tort action was so unreasonable that it "stands out as an intolerable blot upon the legislative landscape of a free and democratic nation".

The Piercey case is only a decision at first instance, and the ruling on s. 15 was not strictly necessary for the decision, because the facts of the case arose before s. 15 came into force. The ruling on s. 15 is, in my opinion, wrong. The workers' compensation legislation in Newfoundland (and everywhere else in Canada) did not simply deny the action in tort to an arbitrarily selected group of accident victims. What it did was to substitute an entirely new system of no-fault employers' liability, which would provide compensation to injured workers on an insured, comprehensive, no-fault basis. This was done on the basis of a legislative judgment that workers would be better off, not worse off, under such a scheme. All workers benefit from the security of insurance against all risks of injury at work, and the assurance of speedy, predictable compensation. The legislative judgment to abolish the tort action reduced the compensation payable to the worker who could establish negligence, but it also meant that more of each premium dollar would go to workers rather than to the lawyers and other intermediaries who operate the tort system. One could reasonably disagree with that legislative judgment, but it is no more than a judgment about the design of an insurance scheme for industrial accidents. In my view, there was no basis for Hickman, C.J.'s extravagant criticisms, and an insufficient basis for a finding of a breach of s. 15. Other courts faced with the same issue have all upheld the denial of the tort action in workers' compensation schemes: Re Terzian and Workmen's Compensation Board (1983), 148 D.L.R. (3d) 380 (Ont. Div. Ct.); Ryan v. Workmen's Compensation Board (1984), 6 O.A.C. 33 (Ont. Div. Ct.); Budge v. Workers' Compensation Board, [1985] 1 W.W.R. 437 (Alta. Q.B.).

For the reasons given above, in my opinion, industrial accident victims form a sufficiently discrete class to support a distinctive no-fault insurance scheme without violation of s. 15. The same is true of automobile accident victims. In Streng v. Township of Winchester (1986), 56 O.R. (2d) 649 (Ont. H.C.), Smith, J. of the Ontario High Court struck down a short limitation period that was applicable to actions against municipalities, but not other defendants. In his view, the nature of the defendant was an irrational basis upon which to distinguish between injured plaintiffs. This was a very active application of s. 15 which has not been followed in a later Ontario case (Mirhadizadeh v. The Queen (1986), 57 O.R. (2d) 441 (Ont. H.C.)). But it is interesting to note that Smith, J. (at p. 657) suggested that "those suffering injuries in car accidents" would constitute a class that could rationally be treated distinctively without violation of s. 15. The Streng case thus provides no support whatever for a constitutional attack on no-fault automobile insurance.

A similar comment may be made about Kask v. Shimizu (1986), 28 D.L.R. (4th) 64 (Alta. Q.B.), in which McDonald, J. of the Alberta Court of Queen's Bench struck down the Rule of Court requiring out-of-province plaintiffs to post security for costs. His reasoning was that the rule offended s. 15 by discriminating against the poor: the plaintiff in the case lacked the resources to post security. It seems obvious that poverty as a ground of discrimination is much harder to justify than the classification involved in no-fault automobile insurance. Another element in Kask was the discrimination on the basis of province of residence, which McDonald, J. thought was probably a breach of the mobility rights in s. 6 of the Charter, although he did not rely on that ground.

This case is so remote from our present concerns that it lends no support to a constitutional attack on no-fault automobile insurance.

These three first instance cases - Piercey, Streng and Kask - would not warrant extended discussion, if it were not for the fact that the C.B.A.-O. opinion relies on them. The Finkelstein opinion (at pp. 26-30) also discusses the cases, reaching conclusions identical to mine. The three cases are slender reeds indeed upon which to base a constitutional attack on no-fault automobile insurance.

American Case-Law

In the United States, the fourteenth amendment guarantees "the equal protection of the laws". This equal protection clause has been interpreted by the courts as requiring that there be a "rational basis" for a legislative distinction. In general terms, what the rational basis test requires is that the impugned distinction must be a reasonable means of achieving a legitimate public purpose. This test is very similar to that used in the Andrews case and in the other Canadian cases that have followed Andrews. (The American courts apply a stricter test to 'suspect' categories, such as race, and the abridgment of fundamental rights, such as the right to vote.)

In New York Central Railroad Co. v. White (1917), 243 U.S. 188 and the Arizona Employers' Liability Cases (1918), 250 U.S. 400, the two workers' compensation cases described above, and in Duke Power Co. v. Carolina Environmental Study Group (1978), 438 U.S. 59, the no-fault nuclear accident case described above, the constitutional challenges to the laws were made not only under the due process clause but also under the equal protection clause. The challenge under the equal protection clause, like the challenge under the due process clause, was unsuccessful. There was a sufficiently rational basis for the distinctive treatment of one class of accident victims.

As explained above, there are numerous American cases in which state no-fault automobile insurance schemes have been challenged. None of the cases has been decided by the Supreme Court of the United States, but many of them have been decided by the highest state courts. Not a single case of which I am aware has held that the distinctive treatment of automobile accident victims violates the equal protection clause, although the equal protection clause has been invoked in virtually every case.

Many American states, as part of a no-fault automobile insurance scheme, deny the tort action in cases where the injuries are minor and permit the tort action in cases where the injuries are major. I have already explained that the American courts have generally held that the denial of the tort action is constitutional. But the statutory 'thresholds' which distinguish the cases in which the tort action is preserved from the cases in which the tort action is abolished, have been challenged on equal protection grounds. In some states, these thresholds are expressed in monetary terms, based on the amount of the medical expenses incurred by the victim. Thus, if the threshold is $10,000, a victim whose injuries give rise to medical expenses of less than $10,000 is confined to the no-fault benefits, while a victim whose medical expenses exceed $10,000 may sue in tort as well. In other states, the thresholds are expressed in verbal terms, defining the severity of the injuries in general phrases such as (to use Michigan as an example) "death, serious impairment of bodily function, or permanent serious disfigurement".

Any threshold is inevitably somewhat arbitrary. However, with only rare exceptions, the American courts have held that it is a legitimate legislative purpose to deny the tort action for minor injuries while retaining it for major injuries. The removal of numerous minor tort claims from the system helps to fund the universal no-fault benefits, which typically do not extend to non-economic loss. The retention of the tort action for serious injuries provides damages for non-economic loss to those victims who are most in need of financial help - provided they can prove negligence. Accepting a rationale of this kind, the American courts have generally upheld both monetary and verbal thresholds as being a reasonable means of achieving a legitimate legislative purpose.

The cases are comprehensively described in Josephine Y. King, "Constitutionality of No Fault Jurisprudence," Utah L. Rev. no. 4 (1982):797.

Thresholds

I have just explained the prevalence in the United States of no-fault automobile insurance schemes which limit the tort action by statutory monetary or verbal thresholds. I have also explained that the American courts have generally upheld these thresholds, despite their inevitably arbitrary character. I am inclined to think that Canadian courts would take the same view. However, there is no doubt that a threshold is the most vulnerable part of a no-fault automobile insurance scheme. From a constitutional standpoint, it would be preferable to either leave the tort action intact or to abolish the tort action altogether. If it is determined to recommend the retention of the tort action only for serious injuries, then this policy should be thoroughly justified with reasons. In assessing the validity of a no-fault insurance scheme, a court would pay attention to the rationale for the scheme as set out in the report that proposed the scheme. This point is elaborated later in my discussion of s. 1 of the Charter.

Termination of Benefits At Age 65

Among the subsidiary points that I have been instructed to address is the question whether a loss-of-income indemnity could terminate at age 65, as has been proposed to the Inquiry by the Insurance Bureau of Canada. The rationale for such a termination date would be, no doubt, that 65 is now the usual retirement age when earned income would cease, and when public income-support and tax-assisted private income-support would start. The argument against such a termination date would be that the use of age as a cut-off point seems to infringe s. 15 of the Charter, which explicitly lists "age" as a prohibited ground of discrimination.

This issue raises a similar constitutional question to that raised by mandatory retirement, which has been attacked as infringing s. 15 of the Charter. In both Harrison v. University of British Columbia (1986), 30 D.L.R. (4th) 206 (B.C.S.C.) and Re McKinney and University of Guelph (1986), 57 O.R. (2d) 1 (Ont. H.C.), courts have sustained university mandatory retirement rules on the basis that it is reasonable to stipulate an age when public and private pension benefits should become payable, and when older workers should give way to younger workers.

The Harrison case used this reasoning to deny that mandatory retirement infringed s. 15. The McKinney case held that mandatory retirement infringed s. 15, but that it was saved by s. 1.

Both of the mandatory retirement cases are only at the trial level, and both cases arose in a university context which introduced some special considerations. Nonetheless, in my judgment, the decisions are likely to be upheld by higher courts, and in other contexts as well. I think that the social benefits of mandatory retirement will be held to be sufficiently compelling to overcome the age classification that is entailed. I note as well that mandatory retirement has been upheld in the United States (Massachusetts Board of Retirement v. Murgia (1976), 427 U.S. 307), and that it is to be found in the judicature provisions of Canada's constitution itself (Constitution Act, 1867, s. 99(2), requiring superior court judges to retire at age 75).

I conclude that the use of age 65 as a cut-off point for a loss-of-income indemnity would probably be held not to offend s. 15 or at least to be justified under s. 1. Obviously, in view of the express mention of age in s. 15 and the absence of rulings by higher courts, it is not possible to be completely confident on this point, and the use of a criterion other than a stipulated age, if that is possible, would be safer from a constitutional standpoint.

Housekeeper Allowances

I do not believe that any constitutional problem is likely to be caused by provision for the indemnity of those who are working outside the market economy: students and housekeepers are the most obvious classes. If compensation is generally to be measured by loss of income, those who have no income inevitably have to be compensated on some essentially arbitrary basis, based on qualifications, future expectations or averages. It seems to me that any bona fide attempt to deal fairly with such cases, even though they are predominantly composed of people characterized by young age (students) or female sex (housekeepers), would not be held to be a violation of s. 15.

Conclusion on s. 15

I conclude that s. 15 is not an impediment to a no-fault insurance scheme for automobile accidents, even though it would treat the victims of automobile accidents differently from the victims of other accidents. The constitutional position would be exactly the same as that of workers' compensation which in my view also does not violate s. 15. I also consider, although I acknowledge some doubt, that a statutory threshold, whether monetary or verbal, for the retention of the tort action, would not violate s. 15.

SECTION 1 OF THE CHARTER

Text of s. 1

In earlier sections of this opinion I have given my opinion that a system of no-fault automobile insurance would not violate s. 7 or s. 15 of the Charter of Rights. If I am right, there is no need to consider s. 1 of the Charter. However, I will briefly consider s. 1.

Section 1 of the Charter provides as follows:

> The Canadian Charter of Rights and Freedoms guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.

Section 1 operates to save a law that is in conflict with a Charter right, provided that the law is a "reasonable limit" on the right, and that the law "can be demonstrably justified in a free and democratic society".

The Oakes Case

In R. v. Oakes, [1986] 1 S.C.R. 103, the Supreme Court of Canada propounded the criteria of reasonableness and demonstrable justification that had to be satisfied in order to bring a law within s. 1. First, the objective of the law must be "of sufficient importance to warrant overriding a constitutionally protected right or freedom" (p. 138). Secondly, once a sufficiently important objective is recognized, the means adopted by the law must be proportional to the objective. This requires that the law (1) "be carefully designed to achieve the objective", (2) must "impair as little as possible the right in question", and (3) must not be disproportionately severe in its impact on the person whose right is limited (pp. 139-140).

Application to No-fault Scheme

The first element of the Oakes test is an assessment of the importance of the objective of the impugned law. In my opinion, the Supreme Court of Canada would hold that the provision of speedy, predictable and universal insurance coverage to accident victims is a sufficiently important objective. It is true that the coverage need not be confined to automobile accident victims, but the history in Ontario and elsewhere of distinctive treatment of industrial accidents and automobile accidents would not be ignored by the Supreme Court of Canada. Reform has always proceeded in stages, and the Court will defer to any reasonable judgment of the Legislature in its determination of how far to go in correcting a social problem. This is illustrated by Edwards Books and Art v. The Queen, [1986] 2 S.C.R. 713, where the Court held that Ontario's Sunday-closing law, although a limit on freedom of religion, was justified under s. 1 by the secular purpose of providing a 'pause day'. This justification was accepted, despite the fact that the law applied only to retail stores, not to other kinds of businesses.

The second element of the Oakes test is that the means employed must be proportional to the objective. This is difficult to deal with hypothetically without an actual draft law to examine, but there seems no reason to doubt that a no-fault insurance plan which provided compensation for all victims of automobile accidents would be held to satisfy the threefold test of proportionality. If the tort action were abolished in whole or in part, this could be justified as relieving the insurance plan (and thus all car owners) of costs that could be used to enrich the universal coverage.

While the burden of proving the elements of justification under s. 1 rests with the government or other proponent of the legislation, the Supreme Court of Canada has not in practice insisted upon much evidence to support laws the purpose of which was reasonably obvious. In the

Edwards case, for example, the Court relied almost exclusively on a report of the Ontario Law Reform Commission that had recommended the enactment of the Sunday-closing law. In the case of no-fault insurance, the report of this Inquiry, as well as any commissioned studies, will all be admissible to establish the rationale of whatever scheme is proposed. Assuming that the Inquiry succeeds in making a powerful case for whatever scheme it proposes, it seems almost certain to me that a court would hold that the requirements of s. 1 of the Charter had been sufficiently established.

Conclusion on s. 1

I conclude that, if (contrary to my opinion) the constitutional inquiry were to advance to a consideration of s. 1 of the Charter, a system of no-fault automobile insurance, including a system that replaced the tort action, would be held to be justified under s. 1.

CONCLUSIONS

1. My general conclusion is that the Ontario Legislature has the constitutional authority to enact a no-fault automobile insurance scheme, under which benefits to accident victims would be less than common-law damages, and under which the tort action would be wholly or partially abrogated.

2. The Legislature's power derives from its authority over "property and civil rights in the province": s. 92(13) of the Constitution Act, 1867. See p. 315, above.

3. The power to adjudicate claims under a no-fault scheme may be entrusted to an administrative tribunal, without any violation of s. 96 of the Constitution Act, 1867. See pp. 315-316, above.

4. The right to sue in tort is probably not within the words 'liberty' or 'security of the person' in s. 7 of the Charter, but, if it is, the substitution of no-fault liability would not be a breach of "the principles of fundamental justice". Therefore, s. 7 of the Charter is not an impediment to the complete or partial abrogation of the right to sue in tort. See pp. 316-320, above.

5. The singling out of automobile accident victims for treatment that is different from that of other kinds of victims can be justified as 'reasonable' and 'fair', and accordingly is not a breach of s. 15 of the Charter. See pp. 320-330, above.

6. The use of a 'threshold', whether monetary or verbal, to deny the tort action for minor injuries while retaining it for major injuries, is probably also not a breach of s. 15 of the Charter. See p. 328, above.

7. The use of age 65 as the termination point for payment of a loss-of-income indemnity is probably also not a breach of s. 15 of the Charter. See pp. 328-330, above.

8. Housekeeper allowances and benefits for students or other people working outside the market economy will have to be fixed on some basis other than actual loss of income. A bona fide attempt to deal fairly with such cases would not be a breach of s. 15 of the Charter. See pp. 329-330, above.

9. If, contrary to my opinion, a no-fault insurance scheme for automobile accidents were held to infringe s. 7 or s. 15 of the Charter, the scheme would be held to be justified under s. 1 of the Charter. In this conclusion, I assume that the scheme would follow the general lines suggested early in this opinion, that the scheme would follow in detail the recommendations of this Inquiry, and that the report of the Inquiry would make a powerful case in policy for the scheme. See pp. 330-332, above.

ADDENDUM

NOTE ON PUBLIC TRUSTEE (ALTA.)

WORKERS' COMPENSATION BOARD

The Decision

In Public Trustee (Alta.) v. Workers' Compensation Board (Alta. Q.B., August 13, 1987), Bracco J. of the Alberta Court of Queen's Bench held that the provision the Alberta Workers' Compensation Act that prevents an injured insured worker from suing a third party employer is contrary to ss. 7 and 15 of the Charter. I understand that this third party employer provision exists in all provincial workers' compensation statutes.

Section 7

With respect to s. 7, Bracco J. holds that the denial of the tort action against the third party employer is a violation of liberty (p. 28) and security of the person (p. 29) in breach of the principles of fundamental justice. He is not very clear about the applicable principle of fundamental justice, but seems to find it in a 'fair exchange' principle (p. 30): he says that a worker gets nothing in return for the denial of the action against the third party.

Assuming that there is a 'fair exchange' principle, it seems hard to argue that it has been broken here. Workers receive the benefit of a scheme of no-fault insurance in return for the loss of the tort action. The denial of the tort action against third party employers removes from the system some of the costs associated with the fault inquiry and frees resources to enrich the no-fault benefits that can be provided. Bracco J. points out that the City of Calgary had to carry liability insurance anyway, because the operation of the rail service created public risks. That is true, but most employers are not similarly exposed, and even the City of Calgary's risks (and therefore its costs of liability insurance) are reduced by the third party employer immunity in the Workers' Compensation Act.

Assuming that Bracco J. is right, and that there has been no fair exchange here, is the fair exchange principle a principle of fundamental justice? I think not, for the reasons given in my opinion of June 23, 1987 at pp. 10-11. I do not think it is a 'basic tenet' of our legal system that every change in the law of torts must provide a 'fair exchange' to persons who lose potential (not actual, be it noted) causes of action. Nor do I think it is a 'basic tenet' of the legal system that tort liability must always be premised on fault. Certainly, these ideas find no support whatever in ss. 8 to 14 of the Charter which, according to Lamer J. in the B.C. Motor Vehicle case, provide "an invaluable key" to the identification of the basic tenets of the legal system.

Section 15

With respect to s. 15, Bracco J. holds that it is a breach of s. 15 for the law to deny to a worker a tort action against the negligent third party employer when a non-worker would possess the cause of action (pp. 34-35). In this ruling, Bracco J. follows the Piercey case (p. 33). But, as I argued in my opinion at pp. 21-22, there is a rational basis for limiting tort actions by workers: they have been granted a right to compensation which has not been granted to non-workers. I believe that this is an answer to the discrimination point.

Conclusion

From the point of view of a proposal for a no-fault automobile insurance plan, Bracco J.'s decision makes two disturbing points. One is that there is constitutional protection under s. 7 for the existing body of tort law. The other is that by reason of s. 15 the law cannot single out groups of accident victims (industrial victims, highway victims) for special treatment. Both these ideas were carefully examined and rejected in my opinion of June 23. I am satisfied that Bracco J. introduces no new considerations to the two points, and that his decision is wrong on both points.

Peter W. Hogg, Q.C.
September 22, 1987.

COMPENSATION FOR AUTOMOBILE ACCIDENT VICTIMS IN ONTARIO: A SIMULATION

Prepared for the Inquiry Into Motor
Vehicle Accident Compensation in Ontario

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SUMMARY

Introduction

Automobile accidents are a major cause of injury and death in Ontario, yet relatively little is known about the financial consequences of accidents or the pattern or extent of compensation for financial loss. This study combines data from a number of sources in order to stimulate the financial impact on those who are injured or killed in Ontario. The computer model that was generated can be used for determining the cost of alternative insurance systems.

The current system of compensation consists of a number of components: Workers' Compensation, the Canada Pension Plan, Unemployment Insurance, employer benefits, Schedule B benefits included with all automobile insurance, tort damages, and income-tested social assistance or welfare programs. Each of these systems has different eligibility criteria, benefit levels, and tax treatment. Consequently, many observers have claimed that the overall system of compensation may under-insure some victims and over-insure others. The primary focus of this study is to examine the relationship between benefit levels and lost income (or lost time) in order to determine the extent of insurance coverage that is being provided. The study analyses programs that offer benefits for loss of ability to work or to engage in normal activities, not those programs that provide medical benefits or rehabilitation for victims. The model of compensation for automobile accident victims provides a useful tool for evaluation compensation for lost time but does not seek to measure nonpecuniary losses or other costs of injuries or death. Furthermore, the model does not capture the administrative costs of the compensation system or the deterrence that might be provided by the fault-based tort system.

The Model

The simulation model was created by combining data on 172,514 persons in Ontario from the 1981 Census of Canada with information on the characteristics of accident victims in Ontario in 1985 obtained from the Ministry of Transportation and Communications. The resulting data base of 110,103 automobile accident victims should have the same characteristics as the actual accident victims in 1985. Information from several sources on the duration of disability was used to impute the amount of lost time for these victims. Finally, the provisions of the programs that provide compensation to victims were programmed in order to determine the compensation that each victim might receive. All calculations are made net of income taxes.

The model predicts that 60,637 persons in 1985 suffered injuries that prevented them from working or engaging in their ordinary activities. This loss is referred to as lost time. Of these, 40,549 lost more than one week and 1,198 were permanently disabled.

Injured persons who are unable to enjoy their usual activities can be said to have "lost time". This lost time may result in wage loss for those in the labour market, but those out of the labour market have real losses as well. Since the dollar value of this lost non-market time is not easy to calculate, an arbitrary value of $140 per week is placed on lost time for those who are not in the labour market. The time loss for those in the labour market is valued with weekly earnings. Losses are measured with both wage loss and time loss.

In principle, complete compensation under tort law is paid when the victim is not at fault. Determination of fault in the model is based on the accident reports filed by the police officer at the scene of an accident. About 62% of those injured (with lost time) are not at fault while 44% of those killed are not at fault. These figures indicate that a majority of those injured can expect to receive some compensation from the tort system. A survey of bodily injury damage claims was undertaken by Joe Cheng at Eckler Partners Ltd. The claims data suggest that the amount paid for lost wages plus non-pecuniary losses decreases as a percentage of the value of lost wages. The relationship between lost wages and tort damages estimated from the Eckler claims data was used to impute the amount of tort damages in the stimulation model. Alternatively, tort damages were assumed to equal the value of lost time minus Accident Benefits.

Limitations of the Model

A model of this type naturally relies on many assumptions, some of which have important effects on the results. The modelling of the government programs should produce reasonably accurate estimates. The model does assume, however, that every victim pursues all of the benefits to which he/she is entitled (and not more). The assumptions concerning private sector coverage are based on incomplete information, but the magnitude of possible error is relatively small. The greatest source of potential error lies in the modelling of tort damages. It is likely that there is a much greater variance in the amount of actual tort compensation for a given loss than is captured in the model. Furthermore, tort compensation is available for partial disabilities, which are not recognized in the model.

The measurement of the adequacy of compensation depends on estimates of the loss as well as estimates of compensation. The duration of disability is only approximate, but errors in duration affect the aggregate estimates, not the individual estimates of the compensation to loss ratio for a given duration. The use of census data for individuals allows one to make reasonable estimates of the size of the after-tax wage loss, but the time-loss measure is based on an arbitrary value of time for those not in the labour force.

The Pattern of Compensation for Injuries

The simulation of victim compensation generates the present value of losses and the present value of compensation at the date of the accident. Table S-1 summarizes the aggregate losses and compensation as predicted by the model. Tort damages were imputed according to the equation estimated with the Eckler data.[1] The total after-tax loss of wages was $311 million and the value of lost time was $640 million. The after-tax compensation was $628 million, nearly equal to the value of the lost time. This surprising result supports the view that the total compensation paid in the current system is adequate but that it needs to be redistributed so as to more closely match each individual's loss. Of course, this view does not take account of the deterrence objective of tort compensation. A total of $203 million, a third of the total, is paid to individuals in excess of the value of their lost time.

TABLE S-1

Sources of Compensation For Injured

Tort Damages	$ 375,358,000	
Accident Benefits	90,324,000	
Long Term Disability	60,425,000	
Short Term Disability and Sick Leave	48,249,000	
Canada Pension Plan	46,309,000	
Unemployment Insurance	21,183,000	
Workers' Compensation	16,921,000	
Welfare (GAINS-D)	3,807,000	
Total Compensation	662,476,000	
- Taxes on Benefits	- 34,744,800	
Compensation After Tax	627,732,000	
Compensation/Wage Loss		2.02
Wage Loss After Tax	310,943,000	
Compensation/Time Loss		0.98
Time Loss After Tax	639,880,000	

Tort damages are the largest source of benefits, contributing 57% of total gross benefits. The benefits are particularly important for those who are not full-time members of the labour force. With the exception of twelve weeks of benefits payable to a homemaker under the Accident Benefits coverage, tort compensation is the only source of compensation for those not in the labour force.

The current principles of tort damages do not permit the deduction of collateral benefits from the damages otherwise payable, with the exception of Accident Benefits. Consequently, the total compensation can exceed the total loss. If tort damages for lost earnings plus non-pecuniary loss were limited to the after-tax value of lost time, tort damages would fall from $375 million to $231 million, a decrease of $144 million. In order to implement such a change in the method of damage assessment the present value of future benefits from all sources would have to be calculated.

Table S-2 presents the number of victims who are covered by alternative programs. Many of those covered by a particular program may not receive benefits from that program because their duration of disability may not be sufficient or their other benefits may be sufficiently high that no benefits are payable. About 60% of the victims are eligible for tort damages and 73% of victims are covered by Accident Benefits. The percentages change if one looks at the subset of victims who have wage loss. Of those with wage loss, 87% are covered by Accident Benefits. The model predicts that 30% of those with wage loss are covered by private (group or individual) long term disability insurance. When Workers' Compensation is added to this, 34.4% of those with wage loss are reasonably well insured for long term disability. An even larger percentage is insured for short term disability. Either Unemployment Insurance or employer short term disability insurance (or sick leave) covers 83.6% of those with wage loss.

The pattern of replacement of lost wages varies significantly with the length of disability. As duration increases, the ratio of compensation to wage loss and the ratio of compensation to time loss fall dramatically (Table S-3). One reason for this is that short term income replacement tends to be more complete than long term disability insurance. Another reason is that unemployment

TABLE S-2

Number and Percent of Injured Covered By Source

	Victims With Time Loss		Victims With Wage Loss	
	Number	% of Victims	Number	% of Victims
Tort Damages	36,326	59.9	23,655	55.6
Accident Benefits	38,167	62.9	35,983	87.4
Long Term Disability	12,377	20.4	12,377	30.1
Short Term Disability	11,792	19.4	11,792	28.7
Canada Pension Plan	38,294	63.2	39,365	95.7
Unemployment Insurance	22,601	37.3	22,601	54.9
Workers' Compensation	1,757	2.9	1,757	4.3
Welfare (Gains D)	70	0.1	57	0.1
TOTAL	60,637	100.0	41,147	100.0

TABLE S-3

Compensation Ratio By Duration of Disability

Duration of Disability	Compensation Wage Loss		Compensation Time Loss	
(Weeks)	Tort Damages Estimated[a]	Tort Damages Equal Time Loss	Tort Damages Estimated[a]	Tort Damages Equal Time Loss
1	19.00	2.05	7.68	1.09
2	7.35	1.44	4.40	1.02
3-4	6.30	1.62	3.37	1.08
5-13	6.59	2.12	2.55	1.13
14-26	3.37	1.66	1.98	1.12
27-52	2.28	1.33	1.57	1.02
53-207	1.94	1.39	1.21	0.94
Permanent	2.03	2.80	0.66	0.88
ALL	9.80	1.88	4.24	1.08

[a] Estimated from the Eckler Partners' claim survey.

insurance provides short term coverage for those without extensive employer benefits. A more important explanation lies in the pattern of tort compensation that was imputed from the Eckler Partners' claim data. Those with as little as one week of lost time will receive an estimated $2,181 plus 46.7% of their lost earnings. This amount is free of income tax while the lost wages were taxed. As a result, the average ratio of compensation to wage loss is a surprising 19.0 for those with only one week of disability. This ratio falls to about two for those with long term disability. The average person with a permanent disability receives twice his/her actual wage loss when all the programs and income tax are taken into account.

Another reason why the replacement ratio for wages is high is that disability programs such as Accident Benefits, Unemployment Insurance and the Canada Pension Plan do not differentiate between part-year and full-year workers. Once eligibility is established, the victim can collect for each week in the year, even if he/she had worked only part-year in the past.[2] The wage loss figures are reduced by the fraction of the year not worked, thereby adding to the ratio.

The ratio of compensation to time loss is a more meaningful measure of the losses (although the value placed on lost time is arbitrary). The ratio of compensation to the value of time loss falls from 7.68 for those with one week of lost time to .66 for those with permanent disability. The latter figure is in line with the ratio provided in employer long term disability plans (but these are not necessarily indexed for inflation).

The pattern of compensation by duration of disability is particularly sensitive to the assumption made about tort compensation. If one assumes that tort damages equal the value of time loss minus accident benefits,[3] the replacement ratio does not fall so dramatically with duration of disability (Table S-3).

The average replacement ratio conceals a wide variation in the percentage replacement. Only 10% of victims receive no compensation; 47% receive more then three times their time loss. This number is affected by the large number of victims with one or two weeks of lost time and several thousand dollars in damages for non-pecuniary loss. If one looks at the distribution for those with permanent disability, about 9% receive no compensation and no one receives more than two times his/her time loss.

The group of victims with less than 25% compensation for lost time consists mostly of victims who were at fault and were therefore not eligible for tort damages. The bulk of the victims who are under-compensated are out of the labour force and are therefore likely to be ineligible for most of the insurance benefits. Of these, 56% are under age twenty, and the majority of these are male. Therefore, if one wanted to stereotype the uncompensated victim, he is a male teenager with little employment history who was driving negligently.

The Pattern of Compensation for Fatalities

When there is a fatality there is a third measure of loss, the loss to the survivors. This measure represents the pecuniary loss suffered by family members in the household, taking into account the savings from the reduction in the number of household members. It is not intended to measure the value that the survivors place on the victim.

The aggregate compensation (for) payable to survivors or the estates of those killed in motor vehicle accidents is shown in Table S-4. Given that the current basis for tort compensation is compensation of survivors, not replacement of lost earnings, tort compensation tends to be a smaller percentage of total wage loss and time loss. Furthermore, it is easier to provide private coverage for survivors' losses than it is to provide disability insurance because the latter has more moral hazard. Consequently, the private insurance arrangements, primarily different types of life insurance, provide a higher percentage of the total compensation. The total after-tax compensation exceeds the aggregate survivor losses but falls well short of compensating for the lost time of the deceased. It should be noted that for efficient deterrence, tort damages for wrongful death should be much higher and should at least equal the victim's time loss.

Tables S-5 and S-6 measure the number of victims whose survivors or estates receive benefits from alternative sources. The modest amount of accident benefits provides compensation in all cases not covered by workers' compensation.[4] The Canada Pension Plan is predicted to

TABLE S-4

Sources of Compensation For Survivors or Estates

Tort Damages	$ 54,593,000	
Canada Pension Plan	27,386,000	
Group Life	14,330,000	
Accident Benefits	8,260,000	
Accidental Death and Dismemberment	8,264,000	
Workers' Compensation	5,571,000	
Survivor Income	2,574,000	
Welfare	1,265,000	
Total Compensation Before Tax	122,248,000	
Taxes	- 5,359,000	
Total Compensation After Tax	116,889,000	
Total Survivor Loss	102,580,000	
Compensation/Survivor Loss		1.14
Total Wage Loss	212,789,000	
Compensation/Wage Loss		.55
Total Time Loss	412,712,000	
Compensation/Time Loss		.28

TABLE S-5

Number and Percent of Deceased Victims Receiving Benefits By Source

	All Victims		Victims With Wage Loss		Victims With Survivors	
	Number	% of Victims	Number	% of Victims	Number	% of Victims
Tort Damages	265	21.3	176	22.7	223	39.9
Accident Benefits	1,205	96.9	739	95.1	536	95.9
Group Life	254	20.4	247	31.8	180	32.2
Accidental Death and Dismemberment	143	11.5	140	18.0	98	17.5
Survivor Income	35	2.8	35	4.5	28	5.0
Canada Pension Plan	621	49.9	621	79.9	420	75.1
Workers' Compensation	39	3.1	38	4.9	23	4.1
Welfare	18	1.4	7	0.9	13	2.3
Total	1,244	100.0	777	100.0	559	100.0

TABLE S-6

Distribution of Compensation-Loss Ratio - Estates or Survivors

	Wage Loss		Time Loss		Survivor Loss	
Compensation/Loss	Number	%	Number	%	Number	%
No Loss	467	37.5	0	0.0	685	55.1
25% or Less	389	31.3	809	65.0	55	4.4
26-50%	122	9.8	178	14.3	86	6.9
51-75%	56	4.5	83	6.7	68	5.5
75-99%	39	3.1	68	5.5	35	2.8
100%	0	0.0	0	0.0	0	0.0
101-125%	42	3.4	48	3.9	24	1.9
126-150%	26	2.1	37	3.0	38	3.1
151-200%	41	3.3	21	1.7	89	7.2
201-300%	34	2.7	0	0.0	91	7.3
300% and Over	28	2.3	0	0.0	73	5.9
All	1,244	100.0	1,244	100.0	1,244	100.0

provide benefits to 75% of those with survivors. The relatively low percentage of victims with survivors who receive tort benefits is due, in part, to the higher percentage of drivers who are at fault in fatal accidents compared to non-fatal accidents.

Survivor loss is much smaller than the other two loss measures. Consequently, the compensation to loss ratio is highest for this measure. In fact, the aggregate compensation exceeds the aggregate survivor loss by 12% (Table S-4). The compensation is only 28% of the value of time loss, which is not surprising given that the rationale for the Family Law Act provisions for wrongful death are intended to compensate survivors, not deter accidents. Fifty-five per cent of the deaths do not give rise to survivor loss. Only 11% of the deaths result in compensation of survivor loss below 50%, but these cases represent about one quarter of the total deaths with survivors.

Cost of No-Fault Benefits

The model is well-suited to forecasting the cost of any alternative compensation system. However, there is no behavioural response built into the model. That is, a generous compensation system would increase the number of lost time injuries and increase the duration of disability. It should also be noted that administrative costs are not included in the estimates. One of the claimed advantages of switching from a fault system to a no-fault system is a reduction in administrative costs.

Consider first a program that would eliminate tort compensation (and Accident Benefits) entirely and would offer primary coverage to all victims of automobile accidents. The benefits would be 90% of after-tax earnings up to a maximum benefit of $30,000 per year. The minimum benefit would be $140 per week ($7,280 per year) for all victims. For those injured prior to age 65 the benefits would be equal to $7,280 after age 65. For those injured after 65, benefits would equal 90% of lost earnings (up to the maximum) for life. This program would cost $519 million or $99 per vehicle.[5] Against this cost one could deduct $90 million in Accident Benefits and $375 million in tort benefits, for a net additional cost of $54 million or $10 per vehicle. There would be substantial savings in other programs (which would provide secondary coverage) to the extent that they would be integrated with the no-fault automobile insurance. These savings would not show up in reduced motor vehicle insurance premiums.

An alternative no-fault system would eliminate tort claims for those falling below some threshold of loss. The threshold might be those with continuing losses, evaluated at the end of the fourth year after the accident. That is, those not permanently disabled would collect from the no-fault system and would not be able to file a tort claim. Those permanently disabled would sue for the future losses only, evaluated at the end of the fourth year after the accident. For the first four years the permanently disabled victim would collect from the no-fault benefit program just described.

This proposed system would reduce tort claims from 35,550 per year to 770. It would universally compensate victims for a limited period of time. At the end of this period those claiming permanent losses and who were not at fault would have to demonstrate permanent disability in an adversarial process. The advantage of using tort damages for permanent losses is that tort damages are able to take into account losses that are difficult to deal with in a rigid no-fault insurance system. The use of lump sum tort damages for long term disability also has the advantage of eliminating the long term disincentive for rehabilitation inherent in any periodic payments system. It is estimated that the average tort claim for lost time and non-pecuniary loss would be $168,000 under the proposed system, compared to $10,559 under the current system.

The permanent loss threshold system is predicted to cost $225 million (Table S-7). The tort damages for injury would fall by $241 million (from $335 million to $134 million)[6] and the accident benefits would fall by $90 million, giving a net saving of $106 million or about $20 per vehicle. In addition there would be savings of $134 million in other programs, provided they all chose to integrate with the automobile benefits, which seems likely in the case of private insurance and workers' compensation. Integration may be more difficult to achieve for federal programs such as Unemployment Insurance and the Canada Pension Plan. The net reduction in the cost of compensating injured victims would be $240 million or $44 per vehicle.

TABLE S-7

Costs of A Threshold System For Personal Injuries

No-Fault Benefits Paid For Four Years, Tort Thereafter

	Aggregate (million $)	Per Vehicle ($)
Gross Benefits	225	43
Change In Cost Of		
Accident Benefits	- 90	- 17
Tort Damages	- 241	- 46
Net Cost	- 106	- 20
Change In Cost Of WC, CPP, LTD, STD, and UI	- 134	- 26
Net Cost	- 240	- 46

Note: These figures do not take into account compensation for medical expenses. The tort figures include non-pecuniary loss and compensation for lost earnings only.

The savings realized would not necessarily represent a gain from society's point of view. From an insurance perspective there would be benefits because compensation would more nearly reflect losses for many individuals who are currently over-insured or under-insured. There would be additional benefits _if_ the proposed system could be administered at a lower cost than the current system.[7] The social cost of the change would be the result of reduced incentives to take care when driving. The reduced incentives would occur because the fault-based compensation would become a smaller percentage of total compensation.

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I. INTRODUCTION

Automobile accidents are a major cause of injury and death in Ontario, yet relatively little is known about the financial consequences of accidents for those injured or for the survivors of those killed. Significant amounts of compensation are paid to victims through public and private insurance programs and the tort system, yet little is known about the pattern or extent of compensation compared to the financial loss.[8] This study combines data from a number of sources in order to simulate the financial impact on those who are injured or killed in Ontario. The computer model that was generated can be used for determining the cost of alternative insurance systems.

The current system of compensation consists of a number of components: Workers' Compensation, the Canada Pension Plan, Unemployment Insurance, employer benefits, Schedule B benefits included with all automobile insurance, tort damages, and income-tested welfare programs. Each of these systems has different eligibility criteria, benefit levels and tax treatment. Consequently, many observers have claimed that the overall system of compensation may under-insure some victims and over-insure others. Furthermore, the administrative cost of providing benefits from so many sources may be larger than under a comprehensive insurance system such as no-fault automobile insurance. The primary focus of this study will be to examine the relationship between benefit levels and lost income, net of income taxes, in order to determine the extent of insurance coverage that is being provided. The study concentrates on programs that offer benefits for loss of ability to work or to engage in normal activities, not those programs that provide medical benefits or rehabilitation for victims.

The next section of the report will briefly describe the various programs that provide income to those with temporary or permanent disabilities and to dependants of those killed in motor vehicle accidents. It must be emphasized that the descriptions of the program structures are intended to provide an overview of the programs, not to provide an exhaustive list of all of the provisions.

II. SOURCES OF COMPENSATION FOR DISABILITY

A. Workers' Compensation

If a worker is injured in a motor vehicle accident in the course of his employment, he will be compensated through the workers' compensation system and will not be able to sue in tort. In 1985 there were 1,840 workers' compensation claims settled that resulted from injuries or death in motor vehicle accidents. This is a small percentage of total accidents, but workers' compensation is important in some occupations. For example, there is a greater than 60% chance that an injured individual, whose occupation is transport equipment operator, is covered by workers' compensation for his injury. Table II-1 presents the number of claims and the compensation under workers' compensation in 1985.

Workers' Compensation benefits are 90% of after-tax earnings up to a maximum benefit of $444 per week. For those whose after-tax weekly wages are less than $225 the benefits equal the after-tax weekly wage. The workers' compensation benefits are not taxable.

B. Canada Pension Plan

The Canada Pension Plan provides long term disability benefits for those who have contributed for at least two of the last three years or at least five of the previous ten years. The benefits are payable after a waiting period of three months. The applicant must be unable to secure regular, substantially gainful employment, and the disability must be prolonged. The weekly benefits are $56 plus approximately 19% of earnings up to a maximum benefit of $146 per week. At age 65 the recipient receives retirement benefits. The children of disabled contributors receive about $22 per week until age 18 (or age 25 if they remain full-time students). In 1986, 1,259 of 18,460 new disability pension recipients in Ontario were disabled because of accidents, poisoning or violence.[9] It is not known what percentage of these disabilities were caused by motor vehicle accidents.

TABLE II-1

Workers' Compensation Claims and Compensation[a]

Motor Vehicle Accidents Settled In 1985

	Claims	Compensation
Injuries		
Temporary	1,693	$ 4,212,419
Permanent	125	8,117,352
Total	1,818	$ 12,329,771
Fatalities	22	$ 1,992,583

[a] The Compensation is the present value of a claim.

Source: Ontario Workers' Compensation Board.

C. Group Long Term Disability

There is a significant amount of income replacement insurance that is provided by or arranged by employers. A much smaller amount of such insurance is sold to individuals. Information on the extent of such coverage is available through life insurers who underwrite most of the long term disability insurance, employee benefit consulting firms who survey employer practices, and surveys of collective agreements. None of these sources provide the precise information necessary to determine the extent of coverage in Ontario. The life insurance figures do not identify the industry and do not include income replacement that is self-insured by employers. The benefit surveys and the collective agreements surveys tend to concentrate on larger firms. The gaps in private coverage are likely to occur in small firms and low wage sectors of the economy.

The Canadian Life and Health Insurance Association reports that its members were covering 801,436 employees for short term income replacement and 1,508,150 persons for long term income replacement in Ontario in 1985.[10] In addition, 139,848 persons were insured through individual income replacement plans. The total number of persons covered for long term disability, 1,647,998, is 40.7% of full-time employees in Ontario. The figure for short term coverage is incomplete because a substantial number of organizations provide short term sick leave without purchasing insurance. The compensation surveys suggest that the extent of short term coverage is at least as great as the extent of long term coverage.

Table II-2 presents the percentage of coverage for various plans as reported in five surveys. The long term disability coverage is very high in managerial and office employment and lower in unionized employment. The benefits typically replace 60 to 70% of wages but are not completely indexed for inflation. The benefits are taxable if the employer contributed to the premiums.

TABLE II-2

Percentage of Employees Covered By Insurance For Disability or Death

	Short Term						
	Sick Leave	Indemnity	Both	Long Term	Group Life	Accid. Death	Survivor Income
Pay Research Bureau[a]							
Management/Professional	93.7	0.2	5.6	96.0	100.0	62.0	27.4
Office	86.6	0.9	11.5	86.6	99.2	59.0	25.1
Non-Office	46.4	40.1	11.3	72.6	95.5	65.0	13.1
Major Collective Agreements, Ontario[b]	34.8	30.5	-	36.9	71.3	26.5	10.6
Board of Trade of Metropolitan Toronto[c]	-	-	82.0	94.0	98.0	90.0	25.0
Executive Compensation Service[d]							
Top Managers	-	-	88.2	78.4	100.0	86.3	-
Middle Managers	-	-	86.1	84.7	100.0	83.3	-
Professional and Technical	-	-	83.7	77.6	100.0	87.8	-
Sales	-	-	78.9	71.1	94.7	84.2	-
Office	-	-	85.7	77.8	96.0	84.9	-
Canadian Manufacturers' Association (Ont.[e])							
Salaried	-	-	95.8	96.5	99.7	84.6	61.0
Hourly-Paid	-	-	97.6	77.4	99.6	89.8	62.5

CONTINUED

TABLE II-2 (Continued)

[a] Pay Research Bureau, Employee Benefits and Working Conditions Canada, 1986, Ottawa: 1987.

[b] Canada, Ministry of Labour, Provisions in Major Collective Agreements, unpublished data, June, 1987.

[c] Board of Trade of Metropolitan Toronto, 1986 Executive Compensation Survey for the Greater Metroplitan Toronto Area. Survey of 181 organizations, of which 52 had under 100 employees.

[d] Executive Compensation Service, Executive Remuneration - Canada 1986/87; Professional, Sales & Technical Renumeration - Canada 1986/87; Office Personnel Remuneration - Canada 1986/87. Data as of June 1, 1986.

[e] Canadian Manufacturers' Association, Ontario Division, Salaries and Working Conditions of Office and Other Selected Salaried Employees In Ontario, 1986; Wages and Working Conditions of Hourly-Paid Employees in Ontario, 1986.

D. Group Short-Term Disability and Sick Leave

Short-term income protection is either provided through an explicit insurance arrangement, called a weekly indemnity, or through sick leave, which is self-insured by the employer. The weekly indemnity plans are more common in blue-collar occupations. Weekly indemnity programs may offer less than full pay, but sick leave is likely to provide full pay for a specified period. To the extent that some plans allow accumulation of unused sick leave, the compensation is not really insurance. An automobile accident victim who cannot work for a period of time would lose sick leave credits and therefore would not really be compensated for his/her loss or earnings.

E. Unemployment Insurance

Unemployment Insurance sickness benefits are payable to those with more than 20 weeks of employment during the previous 52 weeks. The self-employed and those earning less than $106 (and working less than 15 hours per week) are not covered by unemployment insurance, and those covered by workers' compensation are excluded from receiving benefits. Employer sick leave and short term disability benefits are deducted from Unemployment Insurance sickness benefits. The benefits are payable for 15 weeks after a two week waiting period. The benefits equal 60% of the recipient's wage up to a maximum benefit of $318 per week and are taxable.

F. Accident Benefits (Schedule B)

Benefits are payable under the standard Ontario motor vehicle insurance policy for lost earnings of the driver, passengers or others involved in an accident. The benefits are payable regardless of the fault, with an exception for suicides and impaired driving. The income replacement benefits, generally 80% of the weekly wage up to a maximum benefit of $140 per week, are payable for someone who is employed at the time of the accident or was employed six of the previous twelve months.[11] The definition of disability changes two years after the accident. Prior to that time the insured person must be unable to perform "the essential duties of his occupation or employment." After two years he must be unable to engage in "any occupation or employment for which he is reasonably suited by education, training, or experience."

Those receiving benefits for permanent disability can continue to receive the benefits for life. These benefits are not indexed for inflation.

The weekly benefit is reduced if the employee receives benefits from some other sources. For the first two weeks the benefits equal the minimum of $140 or 80% of the weekly wage. Thereafter, the benefits are 80% of the weekly wage, minus benefits from other sources. The benefits are not taxable.

A 'principal unpaid housekeeper' may receive $70 per week for 12 weeks if he/she is completely incapacitated.

G. Tort

Victims who can prove that another party, usually a driver, was negligent ('at fault') can collect damages in court. These damages are reduced to the extent that the victim is also negligent. The tort damages can be substantial compared to most benefit programs. The victim is in principle entitled to enough damages to make him/her 'whole', but the Supreme Court of Canada has placed a ceiling on the amount of damages for non-pecuniary loss (about $200,000). The damages are payable in a lump sum form, unless the parties agree to periodic payments (a 'structured settlement'). The victim must usually hire a lawyer to pursue his/her claim if the damages are significant.

H. Welfare

There are numerous income-tested and asset-tested programs for those with few resources. GAINS-D is the major program for the disabled in Ontario. The benefits vary with the special needs of the recipient, but the weekly amount is about $151 per week for a single person.

III. SOURCES OF COMPENSATION FOR SURVIVORS

A. Workers' Compensation

A lifetime pension is payable to the surviving spouse of a person covered by workers' compensation. The amount payable depends on the age of the surviving spouse and the presence of dependent children. A spouse with no children receives 40% of net earnings, with an additional 1% for each year of age over 40 or with a reduction of 1% for each year of age under 40. A spouse with dependent children receives 90% of after-tax earnings until the youngest child reaches 19 years of age. At that time the age-related pension formula applies. Canada Pension Plan benefits are deducted from the covered earnings when the pension is calculated.

If there is no surviving spouse, the surviving children will receive a pension to age 19. This varies from 30% of after-tax earnings to 90%, depending on the number of children.

Funeral expenses of $1,593 are paid and there is a lump sum death benefit to the spouse of $42,470, adjusted for age. The death benefits range from $21,235 to $63,705. None of workers' compensation benefits are taxable.

B. Canada Pension Plan

The Canada Pension Plan provides benefits in the case of death for those who have contributed for three calendar years and at least one third of the years in their contributory period (or for at least 10 years). Death benefits equal approximately one and a half times the deceased's monthly earnings, up to a maximum of $2,590. Survivor benefits depend on the spouse's age and the presence of dependent children. The weekly benefit is approximately $22 plus 19% of the deceased's earnings, up to a maximum of about $67 per week. When the spouse reaches age 65 the weekly benefit is 60% of the deceased contributor's retirement pension (about 15% of earnings). There are reductions in benefits for survivors under age 45 without dependent children. Each dependent child receives $22 per week. Canada Pension Plan benefits are taxable.

C. Group Life Insurance, Death Benefits and Survivor Income

As indicated in Table II-2, group life insurance is very common. In addition there is often coverage for accidental death, despite the fact that the needs of the survivors are the same regardless of the cause of death. Employers will often allow employees to purchase additional life insurance coverage through the group plan. A less common type of coverage provides income for a surviving spouse.

D. Accident Benefits (Schedule B)

The standard vehicle insurance policy provides benefits for those killed in a motor vehicle accident. Funeral expenses are payable up to $1,000 (which is below the usual cost) and death benefits are payable to the survivors. Following the death of a head of a household, $10,000 is payable plus $1,000 for each dependant beyond the first. The amounts payable for the death of a spouse and dependant are $10,000 and $2,000, respectively.

E. Tort

The Family Law Act permits the survivors to file a tort claim upon the death of a family member. The survivors can collect the present value of the after-tax earnings of the deceased, less the amount assumed to be consumed by the deceased (usually about 30% in the case of a couple without children). Additional amounts are payable for future taxes that will be paid on the investment fund and for loss of "guidance, care and companionship".

F. Welfare

The death of a wage-earner could reduce a family's income and assets to below the maximum to qualify for various welfare programs. Furthermore, the death of the head of a household may make the surviving parent eligible for a program that is intended for single-parent families.[12]

IV. OVERVIEW OF MOTOR VEHICLE INJURIES

A. Ministry of Transportation

A detailed accident report is completed by the police at the scene of an accident. These reports contain a substantial amount of information concerning the type of accident, the vehicles involved, the persons involved, the extent of injury and the conduct of the driver and any pedestrian. These data are reported each year in the Ontario Road Safety Annual Report.

Table IV-1 presents some overall statistics on accidents in Ontario. In 1985, 109,169 persons were injured and 1,191 persons were killed in automobile accidents. The distribution of injuries by severity is shown in Table IV-2. Based on pieces of information from other sources, it seems likely that those with minor or major injuries plus about 20% of those with minimal injuries suffer some loss of time because of their injuries.

The probability of being injured is unusually high for young men. Table IV-3 presents the age pattern of injury by type of activity ('category of involved person'). In Table IV-4 the driver injuries and fatalities are presented as a percentage of the number of drivers in each age and sex category. The table illustrates the dramatic difference in the injury rate between young and old drivers and the differences between men and women.

The Ministry of Transportation and Communications generated a detailed set of tables from their data base for incorporation in the model of automobile injuries in Ontario. Section V of this report describes how this model was developed.

TABLE IV-1

Selected Accident Statistics

Ontario 1985

Accidents	
Total Reportable	189,750
Fatal	1,036
Personal Injury	73,840
Property Damage	114,874
Deaths	
Drivers (Total)	603
Drivers (Impaired or Had Been Drinking)	285
Passengers	356
Pedestrians	182
Other Road Users	50
Total	1,191
Persons Injured	109,169
Other Statistics	
Estimated Ontario Population (1985)	9,066,000
Licensed Drivers	5,660,422
Registered Vehicles	5,218,392
Estimated Property Damage	$547,518,951

Source: Ontario Ministry of Transportation and Communications, '85 Ontario Road Safety Report, pp. 8, 14.

TABLE IV-2

Category of Involved Persons By Severity of Injury 1985

Category of Involved Person	Severity of Injury None	Minimal	Minor	Major	Fatal	Total
Driver	268,622	34,130	18,055	3,674	502	324,983
Passenger	179,515	20,207	12,962	2,548	333	215,565
Pedestrian	294	1,999	2,977	1,123	182	6,575
Motorcyclist	115	2,318	2,012	334	43	4,822
Moped Driver	-	10	15	3	1	29
Motorcycle Driver	864	1,957	2,393	977	97	6,288
Motorcycle Passenger	200	307	455	158	23	1,143
Other	7,009	229	175	151	10	7,574
Total	456,619	61,157	39,004	8,968	1,191	566,979

Source: Ontario Ministry of Transportation and Communications, '85 Ontario Road Safety Report, p. 14.

TABLE IV-3

Category of Persons Injured By Age Groups 1985

	Age Groups										
Category of Persons	0-4	5-15	16-19	20-24	25-34	35-54	55-64	65-74	75+	**UnKn**	Total
Driver	2	64	5,540	10,743	15,429	17,199	4,271	1,906	664	41	55,859
Passenger	1,493	5,007	5,403	6,320	6,275	6,411	2,335	1,444	691	338	35,717
Pedestrian	290	1,611	566	675	857	973	407	356	280	84	6,099
Motorcyclist	29	1,659	856	778	567	273	46	30	12	414	4,664
Moped Driver	-	-	1	6	7	8	3	2	1	-	28
Motorcycle Driver	-	16	1,461	2,030	1,255	516	38	11	-	-	5,327
Motorcycle Pass.	3	66	340	277	150	65	11	-	-	8	920
Other	10	145	113	57	76	57	16	4	9	68	555
Total	1,827	8,568	14,380	20,866	24,616	25,502	7,127	3,753	1,657	953	109,169

Source: Ontario Ministry of Transportation and Communications, '85 Ontario Road Safety Report, p. 16.

TABLE IV-4

Driver Injury and Fatality Rate By Age and Sex

	Injured and Killed As a Percentage of Drivers In Each Group		
Age	Male	Female	All
16-19	3.04	1.58	2.43
20-24	2.41	1.24	1.89
25-34	1.44	0.87	1.17
35-54	0.99	0.76	0.88
55-64	0.72	0.51	0.64
65+	0.56	0.42	0.51
All	1.31	0.83	1.10

Source: Ontario Ministry of Transportation and Communications, licence data from '85 Ontario Road Safety Report, p. 23, injury and fatality data from unpublished tabulation.

B. Ministry of Health

The Ontario Ministry of Health keeps detailed records on the cause and type of injury for those requiring hospitalization. The 1985 data indicate that 13,143 persons were hospitalized as a result of motor vehicle accident injuries. The average length of stay in the hospital was 10.8 days. Table IV-5 indicates the age-sex pattern of hospitalization.

It appears that the hospitalization data exclude many serious cases that ultimately lead to time loss. Given that the hospitalization figures appear to exclude most victims with lost time and at least two-thirds of those with more than one week of lost time, this source of data was not utilized in the simulation. Nevertheless, it might be possible in a future study to use these data to determine the extent of catastrophic injuries. For example, these data indicate that there were 52 hospital admissions with "fracture of vertebral columns with spinal cord lesion" in 1985.

C. Disability Surveys

1. Ontario Ministry of Health

In 1980 the ministry surveyed 15,948 dwellings in Ontario and identified 2,423 handicapped persons.[13] Interviews were conducted on 1,764 handicapped persons. The handicapped were identified by the response to a question concerning 18 specific limitations. For example, the respondent was asked whether or not there was anyone in the household who "is unable to work at all or to work regularly" or "is deaf or has serious hearing problems".

The study identified 64 persons, or 3.8% of the sample, who reported that the primary cause of a first-mentioned physical problem was an "Accident in Travel".[14] The other accident categories were "Work Accident" (8.5%) and "Home Accident" (4.3%). It is extremely difficult to generalize from such a small sample of possible automobile accident victims, but the survey does suggest that automobile accident victims are a small part of the total handicapped population. This survey did not include the institutionalized population.

TABLE IV-5

Hospitalization of Victims of Motor Vehicle Accidents

Ontario 1985, By Age and Sex

Age	Male	Female	Total	Average Number of Days
0-4	202	92	294	7
5-15	817	484	1,301	10
16-20	1,925	743	2,668	9
21-24	1,350	510	1,860	10
25-34	1,651	813	2,464	9
35-44	871	552	1,423	11
45-54	564	448	1,012	11
55-64	465	438	903	13
65-74	326	390	716	16
75+	235	244	479	20
Unknown	17	6	23	11
Total	8,423	4,720	13,143	11

Source: Ontario Ministry of Health.

2. Statistics Canada Health and Disability Survey

Statistics Canada surveyed 126,698 persons in 1983 and 1984 and identified 15,854 disabled persons.[15] Disability was defined according to the World Health Organization definition as "any restriction or lack ... of ability to perform an activity in the manner or within the range considered normal for a human being."[16] There were estimated to be 3.867 million disabled persons in Canada aged 15 and over.[17] Of these, 575,000 were said to be caused by accidents, or 14.9%.[18] In Ontario there were estimated to be 937,000 disabled persons. Multiplying .149 by 937,000 and applying the ratio of travel accidents to total accidents in the Ministry of Health survey gives an estimated population of disabled victims of travel accidents equal to .149*937,000*(64/281) = 31,798. This total excludes those under age 15.

The model developed below contains rough estimates of the permanent disabilities caused per year. The model predicts that 1,198 persons will be permanently disabled each year. At the current rate of injury, with no change in the current population structure and no change in risk of injury, ultimately the number of individuals in the Ontario population who are permanently disabled as the result of automobile accidents would reach 54,491.[19] This is probably an upper bound on the number of permanently disabled automobile accident victims in Ontario.

3. Statistics Canada Absence from Work Survey

Statistics Canada added a special survey to the Monthly Labour Force Survey in February of each year between 1979 and 1982. The sample consisted of one half of the full Labour Force Survey sample (which covers approximately 120,000 persons). The respondents were asked whether they were absent from work for more than two weeks during the previous year due to illness or accident and were asked about any compensation they may have received during this absence. The survey indicates that of 4,257,000 paid workers in Ontario in 1978-1981, 272,000, or 6.4%, were absent two or more weeks.[20] Of these, 80.1% received compensation.

This survey provides some information on the extent of coverage by employer sick leave or disability insurance. In Ontario 23.1% received group insurance and 30.0% received partial or full pay from their employers. The sum of these percentages, 53.1%, may include some double counting,[21] but the number tends to confirm other information on private disability coverage.

D. Green Book

The Insurance Bureau of Canada publishes data on the claims experience of motor vehicle insurance companies.[22] Most of the data combine claims for property damage and bodily injury, but there is some information on the total cost of bodily injury claims. In 1985 the present value of bodily injury 'loss cost' per private passenger vehicle was $162.85.[23] The estimated cost of bodily injury liability claims equals $643 million for about 43,000 bodily injury claims (Table IV-6). These totals include compensation for all heads of damage, not just lost earnings. In the same year there were 20,632 claims (the number of claimants is larger) under the Accident Benefits provisions for loss of income, costing $53,221,000.[24]

E. Summary of Total Compensation

Table IV-6 summarizes the total amounts of compensation from various sources. In many cases, data are unavailable specifically for automobile accidents. The data also differ in the method of costing. Some are on an annual basis while others represent the present value of future payments.

V. DESCRIPTION OF THE MODEL

A. Creation of a Sample of Victims

No single data source contains enough information to determine the extent of compensation for injured victims. Therefore, it was necessary to create a data set by combining existing data sources. A flow chart of the data set creation process is shown in Figure V-1. The foundation for the data set is the 1981 Census of Canada. The census data are available at an individual (or family) level for a one in fifty sample of the population.[25] Data were available for 172,514 persons in Ontario. For each person, information is provided on many variables, including income and work activity in 1980. The complete list of variables from the census that were used in the model is provided in Table V-1.

TABLE IV-6

Aggregate Compensation For Disability In Ontario

	Year	Total	Automobile
Annual Payments			
Short Term Disability[a]	1985	179,633,174	?
Long Term Disability[a]	1985	236,861,380	?
Unemployment Insurance [b]	1986	99,507,770	?
CPP (new beneficiaries)[c]	1986	4,732,300	322,750[d]
Welfare (GAINS-D)	1986	431,400,000	?
Present Value of Benefits For Those Injured In Year			
Workers' Compensation[e]	1985	782,871,588	14,322,354
Accident Benefits[f]	1985-6	-	53,221,495
Tort Bodily Injury[g]	1985-6	-	643,305,000

[a] Canada Life and Health Insurance Association, Survey of Health Insurance Benefits in Canada, 1985.

[b] Statistics Canada, Unemployment Insurance Statistics, Cat. 73-001.

[c] Unpublished data from Health and Welfare Canada.

[d] This is an estimate of the amount paid to new claimants who were disabled because of accident, poisoning and violence. The Canada-wide proportion with such causes was multiplied by the Ontario benefits paid out.

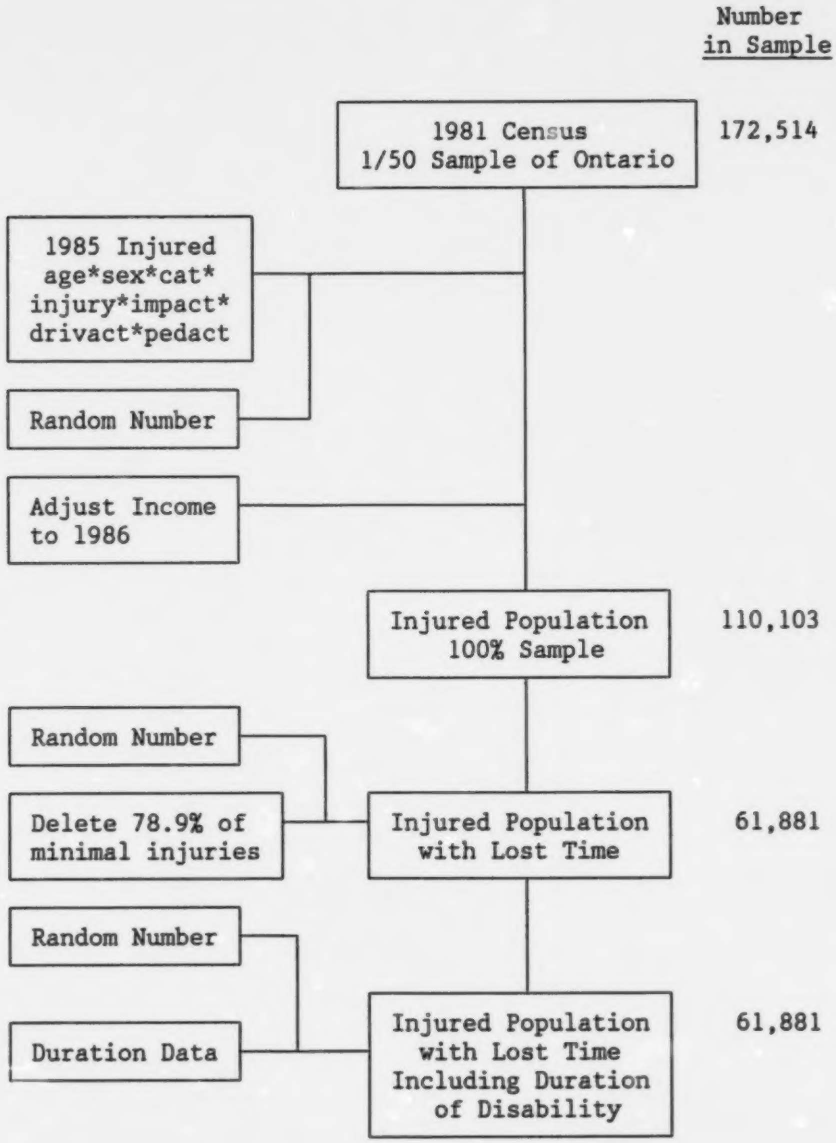
[e] Data provided by Workers' Compensation Board. The cost figures apply to claims settled in 1985.

[f] Unpublished data from the Insurance Bureau of Canada.

[g] Insurance Bureau of Canada, 1986 Automobile Insurance Experience, p. 290 multiplied by .7739 to convert to present value. The data refer to private passenger automobile claims.

FIGURE V-1

Flow Chart For Construction Of Injured Population Data Set


Number in Sample
1981 Census 1/50 Sample of Ontario
172,514
1985 Injured age*sex*cat* injury*impact* drivact*pedact
Random Number
Adjust Income to 1986
Injured Population 100% Sample
110,103
Random Number
Delete 78.9% of minimal injuries
Injured Population with Lost Time
61,881
Random Number
Duration Data
Injured Population with Lost Time Including Duration of Disability
61,881

Note: 1,244 fatalities are included in the injured population.

TABLE V-1

Census Data Used In Model

Province

Age

Sex

Census Family Status

Number of Persons in Census Family

Total Census Family Income Group (1980 income)

Labour Force Activity (Week prior to June 3, 1981)

When Last Worked

Weeks Worked in 1980

Full-time or Part-time Weeks Worked in 1980

Occupation

Industry

Total Income in 1980

Wages and Salaries in 1980

Investment Income in 1980

Age of Husband or Father

Age of Wife or Mother

The Ministry of Transportation and Communications did a special cross-tabulation of persons injured in 1985. This produced the number of injured persons by age, sex, injury type, category of person (driver, pedestrian, etc.), impact type, driver action, and pedestrian action. The resulting seven-dimensional matrix contained 6,048 separate cells. Table V-2 indicates the variables provided by the Ministry of Transportation and Communications.

For any age and sex the probability of being in any of 482 cells (injury type, category of person, impact type, driver action, pedestrian action) could be calculated by comparing the number injured with the population in the particular age and sex group.[27] Random numbers were generated by the computer in order to assign a particular individual on the census data tape to one of these cells.[28] Of course, some individuals are randomly assigned to the 'not injured' category and are no longer considered in the analysis. The resulting sample is a 100% sample of the injured population in Ontario, based on 1985 injuries and fatalities. The total number of persons in the sample is 110,103. This total differs slightly from the Department of Transportation and Communications total (110,189) because of the random process used to assign injuries and death to individuals.[29]

The total number of injured persons includes some victims who have relatively minor injuries which do not result in any time lost from their ordinary activities. Determining the number of victims without time loss is difficult, but there are two pieces of information to go on. First, a survey of accident victims conducted in 1981 found that 56.9% of those injured had lost time.[30] Of those with some lost time it has been assumed in the Insurance Bureau of Canada submission on no-fault insurance that one third lose less than one week.[31] Applying these probabilities to the total number injured gives 60,637 persons with some lost time and 40,549 persons with more than one week of lost time.[32]

The Regie de l'assurance automobile in Quebec has comprehensive data on those who are collecting indemnities for lost time. In Quebec 34.9% of the injured collect indemnities.[33] It is necessary to be disabled for more than one week to qualify for these benefits. As a rough cross-check of the number with more than one week note that 34.9% of 110,103 is 38,426, close to the figure derived above (40,549).

TABLE V-2

Data From Injury Statistics

Age

- 0-15
- 16-19
- 20-24
- 25-34
- 35-54
- 55-64
- 65 and over

Sex

- Female
- Male

Type of Injury

- Minimal
- Minor
- Major
- Fatal

Category of Person

- Driver of Private Passenger Vehicle incl. Motorcycle
- Driver of Other Vehicle
- Passenger
- Pedestrian or cyclist

Impact Type

- Other Motor Vehicle
- Pedestrian or Cyclist
- Fixed object or other circumstances

Driver Action[26]

- Not Known
- Proper
- Improper

Pedestrian Action

- Not Known
- Proper
- Improper

After one week of disability, there is a rapid recovery for most victims. Only a very small fraction are still unable to work or carry out their normal activities after a few years have elapsed. The Quebec experience on duration of disability was applied to the Ontario injured population (Figure V-2). It should be recognized that the average duration will be increased in Quebec because of the universal indemnity.

Beginning with the population of injured persons, 56.9 per cent were retained in the sample because they lost time. The assignment of lost time was assumed to be concentrated amongst those with more serious injuries. This assumption implied that about 79% of those with minimal injuries had no lost time. One third of those with some lost time, concentrated among those with minimal or minor injuries, were assumed to have less than one week of lost time. The remainder was assigned a duration of disability based on a random number according to the probabilities experienced in Quebec. The resulting distribution of lost time is shown in Table V-3.

In this model there is no consideration of partial disability. A week of lost ability to engage in one's ordinary activities is assumed to be complete. In reality the extent of disability varies over a broad range, and any measure of economic loss should recognize that fact. However, most compensation schemes, with the exception of tort damages, do not deal satisfactorily with partial disability. There is usually some incentive for those with partial disabilities to claim total disability. Similarly, those with legitimate partial disabilities are frequently denied compensation. Consequently, the all or nothing assumption inherent in the model, although unsatisfactory from an economic point of view, may adequately mirror the way in which many compensation systems operate.

Distribution of Disability Duration
Quebec Experience

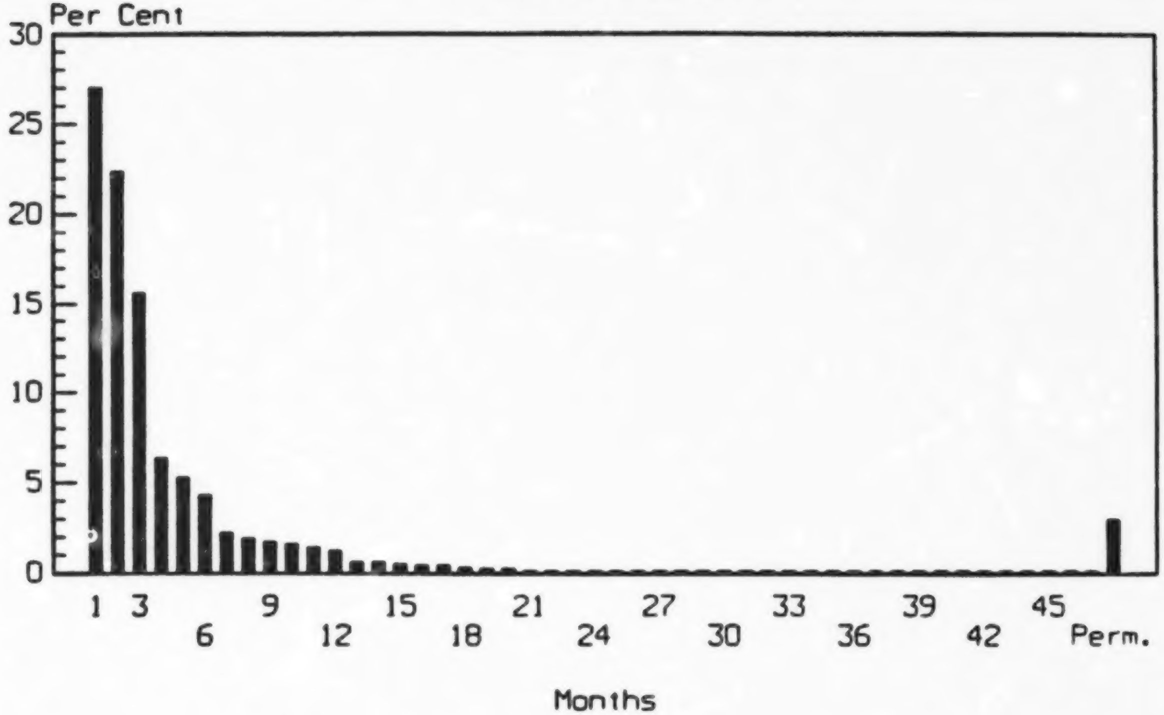


Figure V-2

TABLE V-3

Assumed Duration of Disability

Weeks Disabled	Number	%
1	20,088	33.1
2	3,927	6.5
3	3,607	6.0
4	3,231	5.3
5 - 13	15,492	25.5
14 - 26	6,467	10.7
27 - 52	4,127	6.8
53 - 207	2,500	4.1
Permanent	1,198	2.0
ALL	60,637	100.0

B. Calculation of Victim Losses

1. Injured

Injured victims may suffer several types of losses. They may have pain, out of pocket expenses, and loss of the ability to earn income for a period of time. Furthermore, they may lose the ability to perform work in the home or to enjoy their leisure activities. This study is primarily concerned with the loss of time, whether it be time in the labour force, time spent working in the home, or time spent enjoying leisure activity. Measures of wage loss are also calculated.

a. Wage Loss

When a worker who is in the labour force full-time suffers an injury, the calculation of the loss of wages is straightforward. The loss equals the number of weeks of disability multiplied by the weekly earnings. In this study the wage losses were measured net of income taxes. The measurement becomes more difficult for those who are in the labour force part of the year. For example, if someone normally works one quarter of the year and is injured for one week, has he lost a week of earnings? He may adjust the timing of his work in order to maintain his earnings. If he makes this adjustment, the effect of the disability is to reduce his leisure by one week rather than reduce his earnings. As a measure of the wage loss, the number of weeks of disability were multiplied by the individual's weekly earnings. This product was then multiplied by the weeks of work during the previous year divided by 52. This approach has the advantage that it accurately measures the wage loss for those who are disabled for a discrete number of years, but it may misrepresent the wage loss for those with short term disabilities.

Another measurement problem arises because current earnings and work patterns do not necessarily represent future earnings and work. Young people will have dramatically different earnings when they are older and most workers will eventually retire from the labour force. The only adjustment made in the wage loss measure was to assume that everyone retires at age 65 or 4 years after the accident, whichever comes later. The time loss measure, described below, incorporates some additional adjustments for younger victims.

b. Time Loss

The wage loss measure places no value on a disability for someone who is not in the labour force. The courts are now more willing to place a monetary value on the loss of ability to perform household duties. Extending this principle to all victims, a rough measure of time loss was calculated. The time loss was valued at $140 per week, or $7,280 per year. This is roughly what courts have provided for loss of household services.[34] The value of a week's time loss was assumed to equal the value of after-tax weekly earnings or $140, whichever is greater. Those who are injured before age 21 are assumed to earn the average industrial wage ($430.90 per week in 1986, $327 after tax) after age 21. Everyone over age 65 is assumed to have a time loss valued at $140 per week, the same as for all others who are not in the labour force. The $140 minimum weekly loss is assumed to be net of tax. The wage loss and time loss measures are expressed as the present value of all future losses, discounted with a 2-1/2% real rate of discount.

2. Fatal

The losses arising out of a death can be viewed from the deceased victim's perspective or from the survivors' perspective. Three measures were calculated: wage loss, time loss and survivor loss. All three measures were calculated net of income tax. The wage loss and time loss calculations were made in the same way as for injured victims.

From a deterrence point of view, the at-fault driver should bear a cost at least equal to the present value of the time loss. The loss that the victim might have chosen to insure would be the survivors' losses. This principle is recognized in the Family Law Act, which extends tort claims to fatal accidents. The Act currently allows damages to be paid to survivors on the basis of the survivors' losses, not the deceased's.

The deceased may have been providing full or partial support for the other members of the family, but he was also consuming part of his income. In order to determine the survivors' losses one must calculate the amount of income that the survivors must have in order to enjoy the same standard of living that they enjoyed before the accident. There have been a number of economic studies which attempt to estimate the amount of additional income required to maintain a constant standard of living as family size increases.[35] The methodologies of these studies include budget studies, opinion polls and analyses of expenditure patterns. The approach taken by Statistics Canada provides the most reasonable estimate.[36] By analyzing expenditure patterns of households of different composition, the Statistics Canada study found that a single individual needs 69% as much income as a couple in order to maintain the same standard of living. It is necessary to subtract 31% of family income from the lost earnings in order to estimate correctly the survivor's pecuniary loss. In other words the expected net income provided by the deceased for the benefit of the survivor in any future year is:

Deceased's Net Income

- .31 x [Deceased's Net Income + Survivor's Net Income

= .69 x Deceased's Net Income - .31 x Survivor's Net Income

A similar approach is used when there is more than one survivor. As family size increases, the proportion of family income that is required to maintain the standard of living of the survivors increases above .69.

The calculation of the survivors' losses was made using the time loss measure as the deceased's income. This, in effect, places a value on household services being provided by the victim.

C. Calculation of Compensation for Victims

1. Introduction

The sample of victims contains information on many characteristics of the individuals but does not contain any information on disability insurance coverage. Furthermore, the information on annual weeks worked and annual income refers to the individual's activity during the previous year. Since eligibility for many public and private insurance programs depends on the recent employment history, it was necessary to make some assumptions concerning the timing of the accident. It was assumed that the accident occurs during the census reference week (in June) and that the 1980 information on income and weeks worked refer to the twelve month period just prior to the accident. This assumption should not have any important effect on the results.

Given the diversity of insurance coverage for injured victims as compared to those killed, these two groups were treated separately. The sample of fatalities contains 1,244 victims. The Ministry of Transportation and Communications reported 1,191 persons killed in motor vehicle accidents in 1985. The difference is due to the random process used to generate the data.

Most programs are indexed for inflation, with the exception of private long term disability benefits and accident benefits. Therefore, all calculations were done in real terms, and the value of nominally fixed benefits was assumed to fall at 5% per year. Discounting was done under the assumption of a 2.5% real discount rate. Future real wage growth due to productivity was not included.

2. Taxes

The tax treatment of compensation programs differs considerably. Therefore, the overall compensation was calculated net of taxes (including Canada Pension Plan contributions and Unemployment Insurance premiums). The 1986 tax system was assumed to be in place. Taxes were calculated given the earnings, pension, interest and other income of the individual. Taxes had to be calculated before the injury, after the injury but before compensation, and after compensation. In addition, the taxes had to be determined for those eligible for workers' compensation. It was assumed that all nominal amounts in the tax system are indexed for inflation. It was assumed that the recipient of tort damages could invest (in a home for example) or consume immediately without incurring tax liability.[37]

3. Workers' Compensation

The Workers' Compensation Board provided data on the number of claims by occupation. The claim numbers were divided by the injured population in each occupation (excluding the self-employed) in order to obtain the probability that a victim would qualify for Workers' Compensation. The probabilities are shown in Table V-4. A random number was then generated in order to assign individuals to Workers' Compensation. Average weekly earnings during the previous year, after income tax, were the basis for the benefit calculation.

4. Canada Pension Plan

Canada Pension Plan disability benefits are payable only to those who are totally disabled. The benefits begin after a three month waiting period. Eligibility for the Canada Pension Plan disability insurance is based on the number of years of contributions prior to the disability. Given the absence of more than one year of work history it was necessary to assume that all workers over age 21 are eligible for CPP disability benefits. The pension calculation was also based on current earnings, not an average of previous earnings. Disabled Contributor's Child's benefits were assumed to be payable for all children for eight years after the accident because the exact ages of the children were not known.

5. Long Term Disability

Eligibility for long term disability insurance had to be assigned based on relatively little information. The initial group that might be eligible consisted of full-time workers between the ages of 19 and 64 who were employed at the time of the accident (the reference week), who worked more than 26 weeks during the previous year, whose self-employment income did not exceed their wages, and whose weekly wages were more than $140. These requirements are arbitrary but are generally designed to capture the fact that those who are not full-time participants in the labour force and those just starting a job are not likely to be covered. The assignment by industry and occupation was loosely based on published compensation studies and collective agreement studies (Table II-2).[38] The resulting pattern of coverage by occupation is shown in Table V-5. The individual insurance coverage

TABLE V-4

Percentage Of Those Injured Covered By Workers' Compensation By Occupation

Occupation	Percentage
Managerial, Administrative and Related	1.10
Natural Sciences, Engineering and Mathematics	2.05
Social Sciences and Related	2.68
Teaching and Related	1.20
Medicine and Health	2.43
Artistic, Literary, Recreational and Related	0.61
Clerical and Related	0.80
Sales	1.26
Service	6.99
Farming, Horticultural and Animal Husbandry	3.28
Other Primary	3.54
Processing	0.90
Machining and Product Fabricating, Assembling and Repairing	1.48
Constructions Trades	5.40
Transport Equipment Operating	60.49
Other	4.58

TABLE V-5

Percentage of Ontario Workers Assumed Covered For Long Term Disability, Group and Individual By Occupation[a]

Occupation	Percentage
Managerial, Administrative and Related	81
Natural Sciences, Engineering and Mathematics	73
Social Sciences and Related	30
Teaching and Related	96
Medicine and Health	11
Artistic, Literary, Recreational and Related	73
Clerical and Related	32
Sales	22
Service	24
Farming, Horticultural and Animal Husbandry	22
Other Primary	37
Processing	48
Machining and Product Fabricating, Assembling and Repairing	41
Constructions Trades	17
Transport Equipment Operating	23
Other	37

[a] The percentages are based on full-time employees under age 65.

was assumed to be concentrated among those with more self-employment income than employment income.

For the purposes of the simulation the pattern of disability insurance coverage by industry and occupation does not have to match exactly the actual pattern. It is more important that the coverage mirror the actual distribution of coverage by income class and by eligibility for other benefits. There is no way of knowing whether the assumed pattern is realistic. The number of workers covered in the model (among the total population, not the injured population) is close to the number reported by the Canadian Life and Health Insurance Association.

The long term disability benefits were assumed to equal two thirds of weekly wages and to be taxable. It was assumed that the benefits are not indexed for inflation and that they decline in real terms by 5%.

In most cases subrogation rights are not exercised by those providing long term and short term disability benefits. Therefore, it was assumed that the recipient of disability insurance may receive compensation from tort damages as well. To the extent that some insurers or employers now exercise subrogation rights, the amount of compensation reported in the model will be too high.

6. Short Term Disability

The individuals covered by long term disability were assumed to be also covered for short term disability. The benefits were assumed to equal the wages for those in managerial, teaching and clerical occupations and for half of the workers in other occupations. For the remainder of those covered, the benefits were assumed to equal 70%.

7. Unemployment Insurance

Unemployment Insurance sickness benefits are payable to those with more than 20 weeks of employment during the previous year. The self-employed, those receiving short term disability benefits from employers, and those covered by workers' compensation are excluded from benefits.

8. Accident Benefits

The model was able to replicate closely the Accident Benefits income replacement provisions. Those between the ages of 18 and 64, who worked more than 26 weeks in the previous year or who were employed at the time of the accident, and who were not covered by workers' compensation were eligible for loss of income benefits under Section B, subject to the amount of benefits received from employers and private disability insurance. Those not qualifying for these benefits may qualify as 'principal unpaid housekeepers'. The Accident Benefits for disabilities lasting more than one year are assumed to be constant in nominal terms and to fall in real terms by 5% per year.

9. Tort Damages

a. Liability

The reports filed at the scene of the accident contain information on the conduct of the driver, cyclists, or pedestrian. These data can be used to assign fault in the model. Drivers who were not driving properly were assumed to be at fault. Cyclists and pedestrians who were not riding or walking properly were also assumed to be at fault. Passengers were assumed to be not at fault. These assumptions produce the pattern of liability shown in Table V-6.

Unfortunately, the action of the other driver in a collision with another motor vehicle was not known.[39] However, it appears that 60.87% of the drivers hitting other motor vehicles were found to be driving properly. There are two interpretations of this. First, multi-vehicle collisions could be initiated by one driver driving improperly. Second, two-car collisions could be truly accidents, with neither driver found to be driving improperly by the officer at the scene. This second interpretation was assumed for the purposes of assigning liability. Under this second interpretation it is possible that a court might assign liability to one or the other driver or might divide fault between the two. The risk of losing on the liability question when both drivers were driving properly (as observed at the scene of the accident) would induce most drivers to settle for less than the full loss. In the model it is assumed that ((60.87 - 39.13)/60.87)

TABLE V-6

Number of Injured Victims By Category and Fault

Category of Person	At Fault	Not At Fault	Total
Driver of Passenger Vehicle or Motorcycle	17,908	13,323	31,231
Driver of Other Motor Vehicle	1,178	630	1,808
Passenger	0	20,597	20,597
Pedestrian or Cyclist	4,221	2,780	7,001
TOTAL	23,307	37,330	60,637

*100 = 35.7% of drivers who were driving properly and who hit other motor vehicles would recover one half of their losses. This would occur as a result of an explicit court decision, or more likely, as a result of settlement for less than the full loss.

b. Tort Damages

The principle behind tort damages is straightforward: the victim should be restored to the level of well-being he/she had prior to the accident. This principle is not easily implemented when there are non-pecuniary losses, as will almost always be the case when there are injuries. The Supreme Court of Canada limited damages for non-pecuniary loss to $100,000 in January 1978, indexed for inflation. The limit is now nearly $200,000.

Compensation for loss of wages is straightforward for those who were full-time members of the labour force prior to the accident. The damages will equal wages lost prior to settlement or trial plus the present value of future wages and pensions. It becomes more difficult to calculate damages when someone is not currently in the labour force, but courts will attempt to assess the likelihood that wages would have been earned, had the accident not taken place. Increasingly, courts have been willing to place a value on non-market activities. In the model two alternative assumptions were made concerning tort damages. The first assumption was that the award would be based on the value of lost time, as described above.

A second assumption concerning tort awards is based on the bodily injury insurance claim data collected by Joe Cheng at Eckler Partners. Those completing the claim reports were asked to report the weekly wages and the amount of lost time: from these data third party claimants who were not at fault and were employed were selected. The present value of lost wages as of the date of the accident was compared to the present value of compensation for lost employment income plus non-pecuniary damages. These amounts are net of Section B accident benefits. The average compensation for lost employment, evaluated at the date of the accident was $6,106, compared with the present value of lost wages equal to $9,664. On the other hand, non-pecuniary damages averaged $5,664. Average total damages equalled $11,770, 22% more than the lost wages.

Most previous studies of tort compensation have suggested that the ratio of compensation to loss falls with the magnitude of the loss. The relationship between the present value of wage loss and the present value of compensation was estimated with least squares regression on the Eckler data. Specifically, the compensation for lost employment income plus non-pecuniary loss was regressed on wage loss plus dummy variables for low loss individuals (Table V-7). The coefficients were statistically significant. The hypothesis that the compensation increases one for one with the wage loss could be rejected. Each dollar of wage loss adds $0.467 of tort compensation. The estimated equation was used in the simulation as an alternative predictor of tort damages. In the prediction the value of lost time was substituted for the value of lost wages. For example, predicted tort damages are $20,236 plus 46.7% of the value of lost time for those with a loss in excess of $10,000. Those with losses below $1,000 are predicted to have tort damages equal to $2,181 plus 46.7% of the value of the time loss.

10. Welfare

Permanently disabled individuals between the ages of 18 and 64 who did not receive tort benefits and whose family income was less than $8,769 ($6,000 in 1980) was assumed to be potentially eligible for GAINS-D benefits, subject to annual income tests. The benefits, which in practice vary with special needs, were assumed to equal $151 per week minus the benefits received from other sources. The estimate of those who would receive welfare payments does not include injured children who might eventually receive welfare, unless the family income was initially below $8,769.

D. Sources of Compensation for Survivors

1. Workers' Compensation

Coverage of those killed under workers' compensation was calculated in the same way as for those injured. Given the lack of information on the exact age of children, the benefits were assumed to be payable to all children for twelve years.

TABLE V-7

Regression Of Tort Compensation On Time Loss

Eckler Partners Data

```
Dependent
Variable :  Compensation for Wage Loss plus Non-Pecuniary[a]

                      Analysis of Variance

                    Sum of
Source     DF      Squares      Mean Square  F Value  Prob>F

Model       4   235721011838  58930252959  217.027  0.0001
Error     505   137125008023 271534669.35
C Total   509   372846019861

  Root MSE      16478.30906   R-Squared         0.6322
  Dep Mean      11770.22549   Adj R-Sq          0.6293
  C.V.            139.99994

                      Parameter Estimates

                    Parameter Standard    T for HO:    Prob>|T|
Variable            Estimate    Error     Parameter=0

INTERCEP              20236    1985.2     10.193         0.0001
PVLOSS               .46737    .02039     22.917         0.0001
Loss < 1000          -18055    2391.7     -7.549         0.0001
1000 ≤ L <   5000    -14876    2277.9     -6.530         0.0001
5000 ≤ L < 10000     -12683    2763.9     -4.589         0.0001
```

[a] The tort damages are expressed as the present value at the date of the accident.

2. Canada Pension Plan

The amount of benefits payable had to be calculated with the current earnings of the deceased, rather than with the longer-term measure that is actually used. Given the lack of detailed information on the exact age of children, the benefits were assumed to be payable to all children for nine years.

3. Group Life Insurance

Eligibility for group life insurance was assumed to be the same as for long term disability. The amount of the coverage was set at twice the deceased's annual wages.

4. Group Death Benefits

Sixty per cent of those covered by group life were assumed to be covered by Accidental Death and Dismemberment benefits equal to twice annual earnings.

5. Survivors' Income

Fifteen per cent of those covered by group life were assumed to be covered for survivors' income benefits equal to 25% of the deceased's earnings.

6. Accident Benefits (Schedule B)

The provisions were accurately captured in the model.

7. Tort

Tort damages were payable for those with survivors in the household when the deceased was not at fault. Table V-8 shows the pattern of fault by category of person killed. Forty-four per cent of the victims were not at fault or were only partially at fault. The tort damages were assumed to equal the present value of the survivors' loss, calculated as described above plus $25,000 per family member. No damages were assumed to be payable for the death of a child. The tax gross-up on the award was calculated in a rough way based on a typical set of assumptions.

TABLE V-8

Deceased Victims By Category and Fault

Category of Person	At Fault	Not At Fault	Total
Driver of Passenger Vehicle or Motorcycle	498	100	598
Driver of Other Motor Vehicle	31	1	32
Passenger	0	375	375
Pedestrian or Cyclist	172	67	239
TOTAL	701	543	1,244

8. Welfare

The survivors who did not receive tort benefits were assumed to receive benefits equal to the difference between their income and $151 per week. This is only a rough approximation of existing welfare programs.

E. Limitations of the Model

A model of this type naturally relies on many assumptions, some of which have important effects on the results. The modelling of the government programs should produce reasonably accurate estimates. The model does assume, however, that every victim pursues all of the benefits to which he is entitled (and not more). The assumptions concerning private sector coverage are based on incomplete information, but the magnitude of possible error is relatively small. The greatest source of potential error lies in the modelling of tort damages. It is likely that there is a much greater variance in the amount of actual tort compensation for a given loss than is captured in the model. This variance arises because of differences in the victim's aggressiveness in pursuing a tort action, the quality of the evidence, the ability of lawyers and other factors. Furthermore, tort compensation is available for partial disabilities, which are not recognized in the model.

The measurement of the adequacy of compensation depends on estimates of the loss as well as estimates of compensation. The duration of disability is only approximate, but errors in duration affect the aggregate estimates, not the individual estimates of the compensation to loss ratio for a given duration. The use of census data for individuals allows one to make reasonable estimates of the size of the after-tax wage loss, but the time-loss measure is based on an arbitrary value of time for those not in the labour force.

VI. PATTERNS OF COMPENSATION

A. Injuries

The simulation of the compensation for victims generates the present value of the losses and the compensation at the date of the accident. Table VI-1 summarizes the aggregate losses and compensation as predicted by the

TABLE VI-1

Sources of Compensation For Injured

Tort Damages	$ 375,358,000	
Accident Benefits	90,324,000	
Long Term Disability	60,425,000	
Short Term Disability and Sick Leave	48,249,000	
Canada Pension Plan	46,309,000	
Unemployment Insurance	21,183,000	
Workers' Compensation	16,921,000	
Welfare (GAINS-D)	3,807,000	
Total Compensation	662,476,000	
- Taxes on Benefits	- 34,744,800	
Compensation After Tax	627,732,000	
Compensation/Wage Loss		2.02
Wage Loss After Tax	310,943,000	
Compensation/Time Loss		0.98
Time Loss After Tax	639,880,000	

tion estimated with the Eckler claims data.[40] The total after-tax loss of wages was $310 million and the value of lost time was $639 million. The after-tax compensation was $627 million, nearly equal to the value of the lost time. This surprising result supports the view that the total compensation paid in the current system is adequate but that it needs to be redistributed so as to more closely match each individual's loss.[41] A total of $203 million, a third of the total compensation, is paid to individuals in excess of the value of their time loss, and the rest of the victims receive in aggregate $215 million less than their time loss.

Tort damages are the largest source of benefits, contributing 57% of total gross benefits (Figure VI-1). The benefits are particularly important for those who are not full-time members of the labour force. With the exception of twelve weeks of benefits payable to a homemaker under the Accident Benefits coverage, tort compensation is the only source of compensation for those not in the labour force. It is interesting to note that the sum of Accident Benefits, employer insurance, the Canada Pension Plan, Unemployment Insurance, Workers' Compensation and taxes (subtracted) is 80% of aggregate after-tax wage loss. This aggregate relationship reminds one that a major role for tort damages, aside from deterrence, is to compensate time loss. That is, tort damages provide compensation for those who have lost the ability to enjoy their ordinary activities, whether or not they are in the labour force, as long as the victim was not at fault. In the process the damages over-compensate those who are already insured for wage loss.

The current principles of tort damages do not permit the deduction of collateral benefits from the damages otherwise payable, with the exception of Accident Benefits. Consequently, the total compensation can exceed the total loss. If tort damages for lost earnings plus non-pecuniary loss were limited to the after-tax value of lost time, tort damages would fall from $375 million to $231 million, a decrease of $144 million. In order to implement such a change in the method of damage assessment the present value of future benefits from all sources would have to be calculated.

SOURCES OF COMPENSATION FOR INJURED

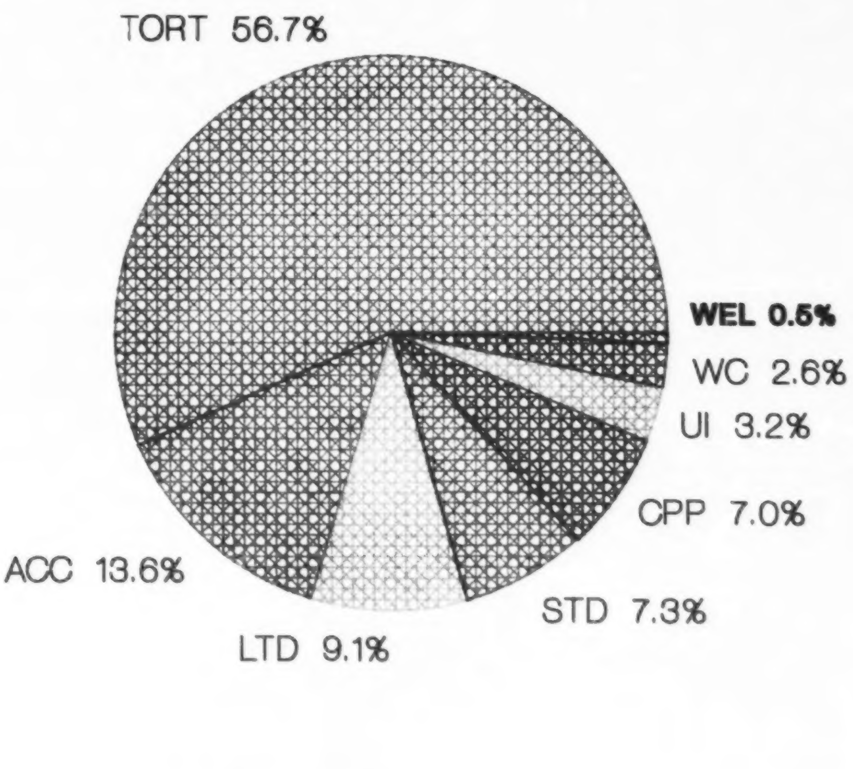


Table VI-2 presents the number of victims who are covered by alternative programs. Many of those covered by a particular program may not receive benefits from that program because their duration of disability may not be sufficient or their other benefits may be sufficiently high that no benefits are payable. About 60% of the victims are eligible for tort damages and 73% of victims are covered by Accident Benefits. The percentages change if one looks at the subset of victims who have wage loss. Eighty-seven per cent of those with wage loss are covered by Accident Benefits. The model predicts that 30% of those with wage loss are covered by private (group or individual) long term disability insurance. When Workers' Compensation is added to this, 34.4% of those with wage loss are reasonably well insured for long term disability. An even larger percentage are insured for short term disability. Either Unemployment Insurance or employer short term disability insurance (or sick leave) covers 83.6% of those with wage loss.[42]

The number of persons actually receiving benefits is lower than the amount covered (Table VI-3). For example, employer benefits reduce the number who can receive accident benefits and Canada Pension Plan benefits are only payable for those who are permanently disabled.

Table VI-4 indicates the number of people who receive benefits from one source who also receive benefits from other sources.

The pattern of replacement of lost wages varies significantly with the length of disability. As duration increases, the ratio of compensation to wage loss and compensation to time loss falls dramatically (Table VI-5). One reason for this is that short term income replacement tends to be more complete than long term disability insurance. Another reason is that unemployment insurance provides short term coverage for those without extensive employer benefits. A more important explanation lies in the pattern of tort compensation that was imputed. Those with as little as one week of lost time will receive an estimated $2,181 plus 46.7% of their lost earnings. This amount is free of income tax while the lost wages were taxed. As a result, the average ratio of compensation to wage loss is a surprising 19.0 for those with only one week of disability. This ratio falls to about 2.0 for those with long term disability. The average person with a permanent disability receives twice his/her actual wage loss when all the programs are taken into account.

TABLE VI-2

Number and Percent of Injured Covered By Source

	Victims With Time Loss		Victims With Wage Loss	
	Number	% of Victims	Number	% of Victims
Tort Damages	36,326	59.9	23,655	55.6
Accident Benefits	38,167	62.9	35,983	87.4
Long Term Disability	12,377	20.4	12,377	30.1
Short Term Disability	11,792	19.4	11,792	28.7
Canada Pension Plan	38,294	63.2	39,365	95.7
Unemployment Insurance	22,601	37.3	22,601	54.9
Workers' Compensation	1,757	2.9	1,757	4.3
Welfare (GAINS-D)	70	0.1	57	.1
TOTAL	60,637	100.0	41,147	100.0

TABLE VI-3

Number and Percent of Injured Receiving Benefits By Source

	Victims With Time Loss		Victims With Wage Loss	
	Number	% of Victims	Number	% of Victims
Tort Damages	35,550	58.6	22,879	55.6
Accident Benefits	28,139	46.4	28,139	68.4
Long Term Disability	1,568	2.6	1,568	3.8
Short Term Disability	11,750	19.4	11,750	28.6
Canada Pension Plan	624	1.0	624	1.5
Unemployment Insurance	12,999	21.4	12,999	34.0
Workers' Compensation	1,757	2.9	1,757	4.3
Welfare (GAINS-D)	70	0.1	57	.1
TOTAL	60,637	100.0	41,147	100.0

TABLE VI-4

INJURED VICTIM RECEIPT OF BENEFITS FROM MORE THAN ONE PROGRAM

	WC	CPP	STD	LTD	UI	ABen	Tort	Wel
Workers' Compensation (WC)	1757	33	265	37	0	0	0	8
Canada Pension Plan (CPP)	33	624	196	214	338	563	361	50
Short Term Disability (STD)	265	196	11750	1494	0	3641	7032	13
Long Term Disability (LTD)	37	214	1494	1568	352	4226	7372	14
Unemployment Insurance (UI)	0	338	0	352	12999	12559	7474	28
Accident Benefits (ABen)	0	563	3641	4226	12559	28139	15939	44
Tort	0	361	7032	7372	7474	15939	35550	0
Welfare (Wel)	8	50	13	14	28	44	0	70

TABLE VI-5

Compensation Ratio By Duration Of Disability

Tort Damages Estimated From Eckler Data

Duration of Disability (Weeks)	Compensation / Wage Loss	Compensation / Time Loss
1	19.00	7.68
2	7.35	4.40
3-4	6.30	3.37
5-13	6.59	2.55
14-26	3.37	1.98
27-52	2.28	1.57
53-207	1.94	1.21
Permanent	2.03	0.66
ALL	9.80	4.24

Another reason why the replacement ratio for wages is high is that disability programs such as Accident Benefits, Unemployment Insurance and the Canada Pension Plan do not differentiate between part-year and full-year workers. Once eligibility is established, the victim can collect for each week in the year, even if he had worked only part-year in the past.[43] The wage loss figures are reduced by the fraction of the year not worked, thereby adding to the ratio.

The ratio of compensation to time loss is a more meaningful measure of the losses (although one could argue about the value placed on lost time). The ratio of compensation to the value of time loss falls from 7.68 for those with one week of lost time to .66 for those with permanent disability. The latter figure is in line with the ratio provided in employer long term disability plans (but these are not necessarily indexed for inflation).

The pattern of compensation by duration of disability is particularly sensitive to the assumption made about tort compensation. If one assumes that tort damages equal the value of time loss minus accident benefits,[44] the replacement ratio does not fall so dramatically with duration of disability (Table VI-6).

The average replacement ratio conceals a wide variation in the percentage replacement. Tables VI-7 and VI-8 provide the distribution of replacement ratios. Only 10% of victims receive no compensation; 47% receive more than three times their time loss. This number is affected by the large number of victims with one or two weeks of lost time and several thousand dollars in damages for nonpecuniary loss. If one looks at the distribution for those with permanent disability, about 9% receive no compensation and no one receives more than double his or her time loss.

Tables VI-9 and VI-10 present some information on those with less than 25% compensation for lost time. This group of victims was at fault and was therefore not eligible for tort damages. The bulk of the victims who are under-compensated are out of the labour force and are therefore likely to be ineligible for most of the insurance benefits. Of these, 56% are under age twenty, and the majority of these are male. Therefore, if one wanted to stereotype the uncompensated victim, he is a male teenager with little employment history who was driving negligently.

TABLE VI-6

Compensation Ratio By Duration Of Disability

Tort Damages Equal Value Of Time Loss

Minus Accident Benefits

Duration of Disability (Weeks)	Compensation / Wage Loss	Compensation / Time Loss
1	2.05	1.09
2	1.44	1.02
3-4	1.62	1.08
5-13	2.12	1.13
14-26	1.66	1.12
27-52	1.33	1.02
53-207	1.39	0.94
Permanent	2.80	0.88
ALL	1.88	1.08

TABLE VI-7

DURATION OF DISABILITY

	1 Week		2 Weeks		3-4 Weeks		5-13 Weeks
Compensation/Wage Loss	N	PCTN	N	PCTN	N	PCTN	N
No wage loss	6,203	30.88	1,335	34.00	2,281	33.36	4,986
No Compensation	429	2.14	91	2.32	133	1.95	274
25% or less	20	0.10	4	0.10	4	0.06	4
26-50%	411	2.05	90	2.29	40	0.58	48
51-75%	703	3.50	156	3.97	160	2.34	175
75-99%	561	2.79	113	2.88	282	4.12	613
100%	68	0.34	13	0.33	25	0.37	50
101-125%	1,268	6.31	278	7.08	539	7.88	1,460
126-150%	774	3.85	147	3.74	312	4.56	801
151-200%	508	2.53	128	3.26	224	3.28	574
201-300%	324	1.61	97	2.47	181	2.65	790
300% and over	8,819	43.90	1,475	37.56	2,657	38.86	5,717
ALL	20,088	100.00	3,927	100.00	6,838	100.00	15,492

CONTINUED

Table VI-7

	DURATION OF DISABILITY						
	5-13 Weeks	14-26 Weeks		27-52 Weeks		53-207 Weeks	
Compensation/Wage Loss	PCTN	N	PCTN	N	PCTN	N	PCTN
No Wage Loss	32.18	2,154	33.31	1,341	32.49	790	31.60
No Compensation	1.77	109	1.69	74	1.79	49	1.96
25% or Less	0.03	3	0.05	2	0.05	24	0.96
26-50%	0.31	24	0.37	35	0.85	106	4.24
51-75%	1.13	63	0.97	127	3.08	123	4.92
75-99%	3.96	212	3.28	262	6.35	164	6.56
100%	0.32	10	0.15	1	0.02	1	0.04
101-125%	9.42	780	12.06	441	10.69	222	8.88
126-150%	5.17	254	3.93	131	3.17	103	4.12
151-200%	3.71	188	2.91	150	3.63	193	7.72
201-300%	5.10	436	6.74	436	10.56	346	13.84
300% and over	36.90	2,234	34.54	1,127	27.31	379	15.16
ALL	100.00	6,467	100.00	4,127	100.00	2,500	100.00

CONTINUED

Table VI-7

	DURATION OF DISABILITY			
	Permanent		All	
Compensation/Wage Loss	N	PCTN	N	PCTN
No Wage Loss	400	33.39	19,490	32.14
No Compensation	-	-	1,159	1.91
25% or Less	18	1.50	79	0.13
26-50%	53	4.42	807	1.33
51-75%	102	8.51	1,609	2.65
75-99%	71	5.93	2,278	3.76
100%	1	0.08	169	0.28
101-125%	117	9.77	5,105	8.42
126-150%	108	9.02	2,630	4.34
151-200%	108	9.02	2,073	3.42
201-300%	76	6.34	2,686	4.43
300% and Over	144	12.02	22,552	37.19
ALL	1,198	100.00	60,637	100.00

TABLE VI-8

DURATION OF DISABILITY

	1 Week		2 Weeks		3-4 Weeks		5-13 Weeks
Compensation/Time Loss	N	PCTN	N	PCTN	N	PCTN	N
No Compensation	1,829	9.10	447	11.38	767	11.22	1,645
25% or Less	189	0.94	42	1.07	91	1.33	138
26-50%	1,469	7.31	309	7.87	389	5.69	813
51-75%	1,088	5.42	246	6.26	312	4.56	582
75-99%	857	4.27	192	4.89	465	6.80	1,234
100%	95	0.47	18	0.46	24	0.35	48
101-125%	1,169	5.82	262	6.67	527	7.71	1,401
126-150%	596	2.97	113	2.88	226	3.31	625
151-200%	78	0.39	23	0.59	45	0.66	270
201-300%	93	0.46	40	1.02	228	3.33	1,086
300% and over	12,625	62.85	2,235	56.91	3,764	55.05	7,650
ALL	20,088	100.00	3,927	100.00	6,838	100.00	15,492

CONTINUED

Table VI-8

	DURATION OF DISABILITY						
	5-13 Weeks	14-26 Weeks		27-52 Weeks		53-207 Weeks	
Compensation/Time Loss	PCTN	N	PCTN	N	PCTN	N	PCTN
No Compensation	10.62	691	10.69	453	10.98	230	9.20
25% or Less	0.89	68	1.05	182	4.41	184	7.36
26-50%	5.25	393	6.08	138	3.34	193	7.72
51-75%	3.76	215	3.32	259	6.28	204	8.16
75-99%	7.97	480	7.42	406	9.84	233	9.32
100%	0.31	10	0.15	-	-	-	-
101-125%	9.04	770	11.91	416	10.08	240	9.60
126-150%	4.03	139	2.15	79	1.91	346	13.84
151-200%	1.74	241	3.73	895	21.69	389	15.56
201-300%	7.01	1,543	23.86	813	19.70	434	17.36
300% and Over	49.38	1,917	29.64	486	11.78	47	1.88
ALL	100.00	6,467	100.00	4,127	100.00	2,500	100.00

CONTINUED

Table VI-8

	DURATION OF DISABILITY			
	Permanent		All	
Compensation/Time Loss	N	PCTN	N	PCTN
No Compensation	106	8.85	6,168	10.17
25% or Less	107	8.93	1,001	1.65
26-50%	123	10.27	3,827	6.31
51-75%	413	34.47	3,319	5.47
75-99%	191	15.94	4,058	6.69
100%	-	-	195	0.32
101-125%	162	13.52	4,947	8.16
126-150%	88	7.35	2,212	3.65
151-200%	8	0.67	1,949	3.21
201-300%	-	-	4,237	6.99
300% and over	-	-	28,724	47.37
ALL	1,198	100.00	60,637	100.00

TABLE VI-9

Number of Injured Victims With Less Than 25% Compensation For Time Loss

Age	Labour Force Status	Driver of Private Passenger Vehicle	Driver of Other Motor Vehicle	Passenger	Pedestrian or Cyclist	ALL
0-15	Employed	-	-	-	11	11
	Unemployed	-	1	-	2	3
	Not In Labour Force	71	32	-	1,814	1,917
16-19	Employed	367	14	8	59	448
	Unemployed	141	3	2	33	179
	Not In Labour Force	1,236	49	3	216	1,504
20-24	Employed	260	10	1	32	303
	Unemployed	219	9	-	24	252
	Not In Labour Force	328	11	-	26	365
25-34	Employed	140	9	-	21	170
	Unemployed	67	9	1	13	90
	Not In Labour Force	191	12	-	28	231
35-64	Employed	152	16	-	19	187
	Unemployed	57	1	-	3	61
	Not In Labour Force	296	9	-	47	352
65+	Employed	12	-	-	3	15
	Unemployed	3	-	-	1	4
	Not In Labour Force	857	19	-	264	1,140
ALL		4,397	204	15	2,616	7,232

TABLE VI-10

Number Of Injured Victims With Less Than 25% Compensation For Time Loss By Sex, Age and Labour Force Status

Female

Age	Labour Force Status Employed	Unemployed	Not In Labour Force	All
0-15	4	-	586	590
16-19	128	43	390	561
20-24	57	62	105	224
25-34	42	33	147	222
35-64	44	28	231	303
65+	7	3	499	509
ALL	282	169	1,958	2,409

Male

Age	Labour Force Status Employed	Unemployed	Not In Labour Force	All
0-15	7	3	1,331	1,341
16-19	320	136	1,114	1,570
20-24	246	190	260	696
25-34	128	57	84	269
35-64	143	33	121	297
65+	8	1	641	650
ALL	852	420	3,551	4,823

B. Fatalities

The aggregate compensation payable to survivors or the estates of those killed in motor vehicle accidents is shown in Figure VI-2 and Table VI-11. Given that the current basis for tort compensation is compensation of survivors, not replacement of lost earnings, tort compensation tends to be a smaller percentage of total wage loss or time loss. Furthermore, it is easier to provide private coverage for survivors' losses than it is to provide disability insurance because the latter has more moral hazard. Consequently, the private insurance arrangements, primarily different types of life insurance, provide a higher percentage of the total compensation. It is interesting to note that the total after-tax compensation exceeds the aggregate survivor losses but falls well short of equalling the value of the lost time of the deceased. It should be noted that for efficient deterrence, tort damages for wrongful death should be much higher and should at least equal the victim's time loss.

Table VI-12 measures the number of victims whose survivors or estates receive benefits from alternative sources. The modest amount of accident benefits provides compensation in all cases not covered by workers' compensation.[45] The Canada Pension Plan is predicted to provide benefits to 75% of those with survivors. The relatively low percentage of victims with survivors who receive tort benefits is due, in part, to the higher percentage of drivers who are at fault in fatal accidents. Thirty-four percent of the fatal accidents involve impact with a fixed object or other circumstances (rollover for example) compared with 23% of the accidents with injuries.[46] These types of accidents can be assumed to be the fault of the driver. Table VI-13 shows the two-way classification of receipt benefits from alternative programs.

SOURCES OF COMPENSATION FOR SURVIVORS

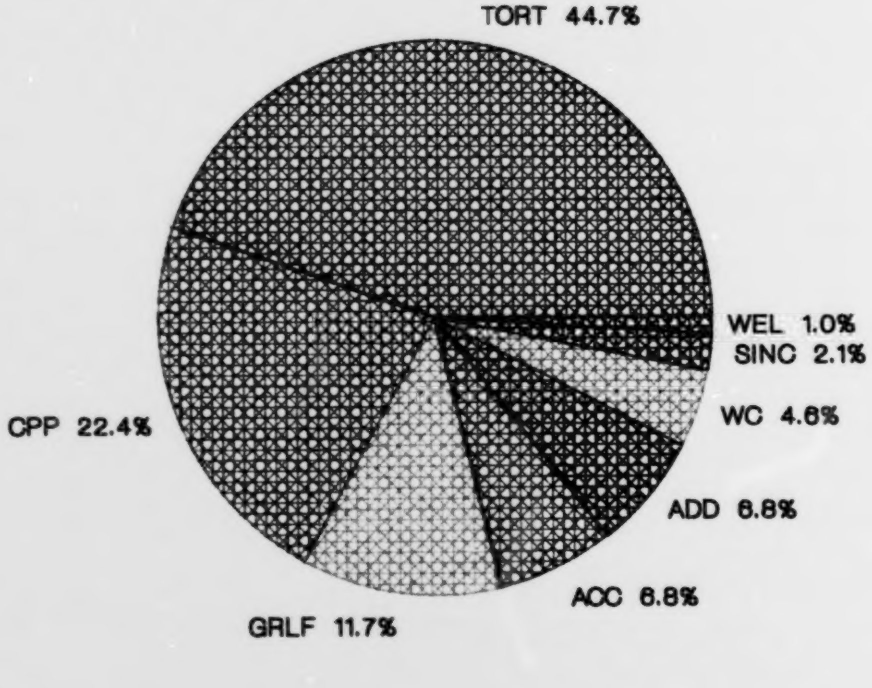


TABLE VI-11

Sources of Compensation For Survivors or Estates

Tort Damages	$ 54,593,000	
Canada Pension Plan	27,386,000	
Group Life	14,330,000	
Accident Benefits	8,260,000	
Accidental Death and Dismemberment	8,264,000	
Worker's Compensation	5,571,000	
Survivor Income	2,574,000	
Welfare	1,265,000	
Total Compensation Before Tax	122,248,000	
Taxes	- 5,359,000	
Total Compensation After Tax	116,889,000	
Total Survivor Loss	102,580,000	
Compensation/Survivor Loss		1.14
Total Wage Loss	212,789,000	
Compensation/Wage Loss		.55
Total Time Loss	412,712,000	
Compensation/Time Loss		.28

TABLE VI-12

Number and Percent of Deceased Victims Receiving Benefits By Source

	All Victims		Victims With Wage Loss		Victims With Survivors	
	Number	% of Victims	Number	% of Victims	Number	% of Victims
Tort Damages	265	21.3	176	22.7	223	39.9
Accident Benefits	1,205	96.9	739	95.1	536	95.9
Group Life	254	20.4	247	31.8	180	32.2
Accidental Death and Dismemberment	143	11.5	140	18.0	98	17.5
Survivor Income	35	2.8	35	4.5	28	5.0
Canada Pension Plan	621	49.9	621	79.9	420	75.1
Workers' Compensation	39	3.1	38	4.9	23	4.1
Welfare	18	1.4	7	0.9	13	2.3
Total	1,244	100.0	777	100.0	559	100.0

TABLE VI-13

Receipt Of Benefits From More Than One Program By Survivors and Estate

	WC	CPP	GRLF	ADD	SI	ABen	Tort	Wel
Workers' Compensation (WC)	39	30	11	9	2	0	0	0
Canada Pension Plan (CPP)	30	621	236	134	32	591	165	5
Group Life (GRLF)	11	236	254	143	35	243	70	0
Accidental Death and Dismemberment (ADD)	9	134	143	143	18	134	40	0
Spouse Insurance (SI)	2	32	35	18	35	33	10	0
Accident Benefits (ABen)	0	591	243	134	33	1205	265	18
Tort	0	165	70	40	10	265	265	0
Welfare (Wel)	0	5	0	0	0	18	0	18

Table VI-14 provides the distribution of compensation-loss ratios for three alternative measures of loss: wage loss, time loss and survivor loss. Since the survivor loss is the smallest of the three, the compensation to loss ratio is highest for this measure. In fact, the aggregate compensation exceeds the aggregate survivor loss by 12% (Table VI-11). The compensation is a much smaller percentage of the value of time loss, which is not surprising given that the rationale for the Family Law Act provisions for wrongful death are intended to compensate survivors, not deter accidents. Fifty-five percent of the deaths do not give rise to survivor loss (as measured here). Only 11% of the deaths result in compensation of survivor loss below 50%, but these cases represent about one quarter of the total deaths with survivors.

Tables VI-15 and VI-16 provide the age, sex, labour force status, and category of person for those whose survivors received less than 25% of their losses. The women tend to be out of the labour force. Unlike the under-compensated injured male victims, the men in this group tend to be employed because those with a family are more likely to be in the labour force than those without families. Compensation for survivors tends to be low when the victim was at fault and other forms of survivor benefits are not payable.

TABLE VI-14

DISTRIBUTION OF COMPENSATION-LOSS RATIO

ESTATES OR SURVIVORS

Compensation/Loss	Wage Loss		Time Loss		Survivor Loss	
	Number	%	Number	%	Number	%
No Loss	467	37.5	0	0.0	685	55.1
25% or Less	389	31.3	809	65.0	55	4.4
26-50%	122	9.8	178	14.3	86	6.9
51-75%	56	4.5	83	6.7	68	5.5
75-99%	39	3.1	68	5.5	35	2.8
100%	0	0.0	0	0.0	0	0.0
101-125%	42	3.4	48	3.9	24	1.9
126-150%	26	2.1	37	3.0	38	3.1
151-200%	41	3.3	21	1.7	89	7.2
201-300%	34	2.7	0	0.0	91	7.3
300% and Over	28	2.3	0	0.0	73	5.9
ALL	1,244	100.0	1,244	100.0	1,244	100.0

TABLE VI-15

Number Of Survivors With Less Than 25% Compensation By Age, Sex and Labour Force Status Of Deceased

Female Deceased

	Labour Force Status of Deceased			
Age of Deceased	Employed	Unemployed	Not In Labour Force	All
16-19	-	-	1	1
20-24	2	1	1	4
25-34	1	-	2	3
35-64	-	-	7	7
All	3	1	11	15

Male Deceased

	Labour Force Status of Deceased			
Age of Deceased	Employed	Unemployed	Not In Labour Force	All
16-19	-	1	-	1
20-24	17	1	-	18
25-34	19	-	-	19
35-64	12	-	2	14
65+	1	-	-	1
ALL	49	2	2	53

TABLE VI-16

Number Of Survivors With Less Than 25% Compensation By Age, Labour Force Status and Category of Deceased

Deceased		Category of Deceased			
Age	Labour Force Status	Driver of Private Passenger Vehicle	Driver of Other Motor Vehicle	Pedestrian or Cyclist	ALL
16-19	Unemployed	1	-	-	1
	Not In Labour Force	1	-	-	1
20-24	Employed	15	1	3	19
	Unemployed	2	-	-	2
	Not In Labour Force	1	-	-	1
25-34	Employed	16	2	2	20
	Not In Labour Force	1	-	1	2
35-64	Employed	10	2	-	12
	Not In Labour Force	9	-	-	9
65+	Employed	1	-	-	1
ALL		57	5	6	68

VII. ALTERNATIVE PROGRAMS FOR PERSONAL INJURY COMPENSATION

A. No-Fault Motor Vehicle Insurance

The model is well-suited to forecasting the cost of any alternative compensation system. However, there is no behavioural response built into the model. That is, a generous compensation system would increase the number of lost time injuries and increase the duration of disability. Given that the duration of disability data are based, in part, on the experience in Quebec, such a response may already be included in the model, but any significant extension of benefits beyond those provided in Quebec could lead to higher costs. It should also be noted that administrative costs are not included in the estimates. One of the claimed advantages of switching from a fault system to a no-fault system is a reduction in administrative costs.

Consider first a program that would eliminate tort compensation (and accident benefits) entirely and would offer primary coverage to all victims of automobile accidents. The benefits would be 90% of after-tax earnings up to a maximum benefit of $30,000 per year. The minimum benefit would be $140 per week ($7,280 per year) for all victims. For those injured prior to age 65, the benefits would be set at $7,280 at age 65. For those injured after 65, benefits would equal 90% of lost earnings (up to the maximum) for life. This program would cost $519 million or $99 per vehicle.[47] Against this cost one could deduct $90 million in Accident Benefits and $375 million in tort benefits, for a net additional cost of $54 million or $10 per vehicle. There would be substantial savings in other programs (which would provide secondary coverage) to the extent that they would be integrated with the no-fault automobile insurance. These savings would not show up in reduced motor vehicle insurance premiums.

B. Threshold No-Fault

An alternative no-fault system would eliminate tort claims for those falling below some threshold of loss. The threshold might be those with continuing losses, evaluated at the end of the fourth year after the accident. That is, anyone not permanently disabled would collect from the no-fault system and would not be able to file a tort claim. Those permanently disabled would sue for the future losses only, evaluated at the end of the fourth year after the accident. For the first four years the permanently disabled victim would collect from the no-fault benefit program, described in the previous section.

This proposed system would reduce tort claims from 35,550 per year to 770. It would universally compensate victims for a limited period of time. At the end of this period, those claiming permanent losses and who were not at fault would have to demonstrate permanent disability in an adversarial process. The advantage of using tort damages for permanent losses is that tort damages are able to take into account losses that are difficult to deal with in a rigid no-fault insurance system. For example, tort damages can better approximate the losses associated with long term partial disability. Furthermore, the tort system has the flexibility to provide appropriate permanent compensation for those who are not in the labour force at the time of the accident, yet would have significant long term income loss. For example, the earnings of a young person at the time of an accident are not representative of long term earnings. Similarly, homemakers might reduce their labour force participation while their children are young. Those not in the labour force are not always treated fairly under no-fault systems because they must have a set of rigid rules for dealing with such cases. The use of lump sum tort damages for long term disability also has the advantage of eliminating the long term disincentive for rehabilitation inherent in any periodic payments system. It is estimated that the average tort claim for lost time and non-pecuniary loss would be $168,000 under the proposed system, compared to $10,559 under the current system.

The permanent loss threshold system is predicted to cost $225 million (Table VII-1). The tort damages for injury would fall by $241 million (from $335 million to $134 million)[48] and the accident benefits would fall by $90 million, giving a net saving of $106 million or about $20 per vehicle. In addition, there would be savings of $134 million in other programs, provided they all chose to integrate with the automobile benefits, which seems likely in the case of private insurance and workers' compensation. Integration may be more difficult to achieve for federal programs such as Unemployment and the Canada

TABLE VII-1

Costs of A Threshold System For Personal Injuries

No-Fault Benefits Paid For Four Years, Tort Thereafter

	Aggregate (million $)	Per Vehicle ($)
Gross Benefits	225	43
Change In Cost Of		
Accident Benefits	- 90	- 17
Tort Damages	- 241	- 46
Net Cost	- 106	- 20
Change In Cost Of WC, CPP, LTD, STD, and UI	- 134	- 26
Net Cost	- 240	- 46

Note: These figures do not take into account compensation for medical expenses. The tort figures include non-pecuniary loss and compensation for lost earnings only.

Pension Plan. The net reduction in the cost of compensating injured victims would be $240 million or $44 per vehicle.

The savings realized would not necessarily represent a gain from society's point of view. From an insurance perspective there would be benefits because compensation would more nearly reflect losses for many individuals who are currently over-insured or under-insured. There would be additional benefits if the proposed system could be administered at a lower cost than the current system.[49] The social cost of the change would be the result of reduced incentives to take care when driving. The reduced incentives would occur because the fault-based compensation would become a smaller percentage of total compensation.

ENDNOTES

1. The aggregate tort damages were similar under the alternative approach ($353 million) but the distribution of the damages among victims is very different.

2. Benefit levels in the CPP and unemployment insurance are based on previous annual earnings, but those with earnings at the maximum annual insurable amounts will receive maximum weekly benefits.

3. The amount is discounted by 50% for some drivers because of contributory negligence.

4. There are some exclusions for those committing suicide, those convicted of impaired driving and those not authorized to drive the vehicle, but these are not captured in the model.

5. There were 5,218,392 registered vehicles in 1985. Ontario Ministry of Transportation and Communications, Ontario Road Safety Annual Report, 1985, p.8.

6. The tort damages were predicted using the estimates from the Eckler data.

7. These savings may be small. Under the current system the legal expenses are concentrated in the serious cases that would remain in the tort system. Furthermore, there would be more claimants under the proposed system, thereby adding to administrative costs.

8. The only recent Ontario Interministerial Task Force on Motor Vehicle Injuries, Injury: An Ontario Survey of the Societal and Personal Costs of Hospitalized Motor Vehicle Accident Victims, Summary, and Technical Report, July 1981. In the United States there is a recent study by John E. Rolph, et al., Automobile Accident Compensation, 3 vols., Rand Institute for Civil Justice, 1985.

9. Data provided by Health and Welfare Canada.

10. Canadian Life and Health Insurance Association, Survey of Health Benefits in Canada, 1985, Table 4.

11. This latter provision applies only if the victim is between the ages of 18 and 64.

12. The single parent is not subject to the same requirements concerning job search that are imposed on the head of a two-parent family.

13. Ontario Ministry of Health, Survey of Non-Institutionalized Physically Handicapped Persons in Ontario, July 1982.

14. Ibid., pp. 43-44.

15. Statistics Canada, Report on the Canadian Health and Disability Survey: 1983-1984. (Cat. 82-555E).

16. Op. cit., p. 10.

17. Op. cit., p. 50.

18. Ibid.

19. This assumes that the permanently disabled have the same life expectancy as the rest of the population. The calculations were based on survival data in Statistics Canada, Life Tables: Canada and Provinces: 1980-1982, May 1984. (Cat. 84-532).

20. Statistics Canada, Results from the Absence from Work Surveys: 1978 to 1981, November 1982, p. 107. (Research Paper 32).

21. Ibid., p. 103. In 1981, 7.5% of the total absent received compensation from more than one source.

22. 1986 Automobile Insurance Experience ("Green Book") (Toronto: Insurance Bureau of Canada, 1987).

23. Ibid, p. 290.

24. Unpublished data provided by the Insurance Bureau of Canada.

25. These data are called the Public Use Sample Tape.

26. Bicyclists are considered drivers.

27. The probability of injury was adjusted upwards by 1.059% for women and .536% for women to allow for those whose age was unknown.

28. Given the large number of 16 to 34 year old men who are injured, each man in that category on the census tape had to be given two chances to be injured in order to give the correct number of injured persons. In other words, some young men will appear twice in the injured population data set. They become two separate individuals in the new data set and will most likely have different characteristics concerning the type of accident and extent of disability.

29. This total differs slightly from the published total because of the omission of those with unknown sex from the tabulations and because the data received from the Ministry of Transportation and Communications reflects revisions since the 1985 Ontario Road Safety Annual Report was published.

30. Ontario Interministerial Task Force on Motor Vehicle Injuries, Injury: An Ontario Survey of the Societal and Personal Costs of Hospitalized Motor Vehicle Accident Victims: Technical Report, July 1981, p. 128.

31. Submission by Insurance Bureau of Canada to The Honourable Mr. Justice Coulter A. Osborne, Inquiry Into Motor Vehicle Accident Compensation in Ontario, April 1987, exhibit II-11.

32. The percentage of injured victims with lost time does not exactly equal 56.9% because of the stochastic process used to assign time loss to victims.

33. Regie de l'assurance automobile, Bilan 1984 - Tome 1, p. 14; Tome 2, p. 42.

34. Nielsen v. Kaufmann (1976), 54 O.R. (2d) 188 (Ont. C.A.). In this case the lower court based the loss on $8,840 per year. The Court of Appeal reduced the figure because the victim would have worked full-time for part of her life. The Court of Appeal cautioned against the use of rigid arithmetic procedures (based on the cost of a housekeeper) for valuing this loss.

35. For review of this literature see Samuel A. Rea, Jr., "Taxes, Transfer, and the Family," University of Toronto Law Journal 34 (1984): 314.

36. Statistics Canada. Consumer Income and Expenditure Division. Research and Analysis Section, Revision of Low Income Cut-offs, 1973, p. 7. The newer version of the low income cutoffs contain implicit dependency ratios which are inconsistent as the family size grows. See Statistics Canada, Income Distributions by Size in Canada: 1980, 1982, pp. 120-125. (Catalogue 13-207).

37. A structured settlement would also avoid all taxes.

38. Ministry of Labour, Provisions in Major Collective Agreements in Canada Covering 500 and More Employees, 1985, p. 175, provides the number of covered employees by industry.

39. The data file at Ministry of Transportation and Communications would permit one to extract this information, but this was not feasible in the limited time available.

40. The aggregate tort damages were similar under the alternative approach ($353 million) but the distribution of the damages among victims is very different, as discussed below.

41. One reason for a close correspondence between the two numbers is that the Accident Benefits weekly benefit for those with no other pension equals the assumed value of time loss. However, these benefits are only 14% of the aggregate benefits.

42. In the model these programs are mutually exclusive. In practice, someone who exhausts his employer leave can apply for unemployment insurance.

43. Benefit levels in the CPP and unemployment insurance are based on previous annual earnings, but those with earnings at the maximum annual insurable amounts will receive maximum weekly benefits.

44. The amount is discounted by 50% for some drivers.

45. There are some exclusions for those committing suicide, those convicted of impaired driving, and those not authorized to drive the vehicle, but these are not captured in the model.

46. Ontario Ministry of Transportation and Communications, Ontario Road Safety Annual Report, 1985, p. 29.

47. There were 5,218,392 registered vehicles in 1985. Ontario Ministry of Transportation and Communications, Ontario Road Safety Annual Report, 1985, p. 8.

48. The tort damages were predicted using the estimates from the Eckler data.

49. These savings may be small. Under the current system the legal expenses are concentrated in the serious cases that would remain in the tort system. Furthermore, there would be more claimants under the proposed system (those out of the labour force, primarily), thereby adding to administrative costs.

THE FUNCTION OF DETERRENCE IN MOTOR VEHICLE ACCIDENT COMPENSATION SCHEMES

**Prepared for the Inquiry Into Motor
Vehicle Accident Compensation in Ontario**

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September 4, 1987

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G. SUMMARY 462

A. THE QUESTION

Following the introduction of no-fault compensation schemes, there have been recorded increases in mortality, morbidity, and property damage rates related to Motor Vehicle Accidents (MVA). Two professional groups involved in thinking seriously about these matters, lawyers and traffic/safety experts, have raised a question as to whether the increases might be due to the elimination of some deterrent influence previously coming from the tort system.

Unfortunately, the concepts or hypothetical mechanisms for which the term 'deterrence' serves as a label, are not the same for the two groups and, for each, there is some fuzziness about what they are. Since both groups generally believe in deterrence, there has not been much stimulus for the sort of learned dispute which might clarify these notions. Each, hearing the other affirm the existence of this influence, seems to assume that its own meaning applies. Members of either group accept that the word has some definite meaning, even if their own personal grasp is vague or incomplete. There is a resulting tendency to slide uncritically into consensus about how to understand the events surrounding changes in compensation schemes.

The target argument is that rate increases result from lost deterrence. Its structure gives us three issues to consider: the quality of the evidence; the quality of the concepts; and the quality of the logic which conjoins evidence and concepts.

B. THE EVIDENCE

Data from a number of jurisdictions are apparently consistent with the hypothesis that introducing a no-fault system releases the driving population from some restraining influence which had been suppressing MVA-related rates. They cannot, however, be construed as proof. There have, on the other hand, been no studies showing that MVA-related rates go down after the introduction of no-fault compensation schemes.

The data in question are all retrospective. This means that the measures were chosen largely from amongst existing routinely-gathered data and compared to similar data compiled before the change. This does not by itself reduce the value of these data but, had the research been devised in advance, it would have been possible to select measures which more directly tested the hypothesis. No 'process' measures related to deterrence have been reported.

In no situation have there been experimental conditions applied; that is, there has not been a randomly-selected no-fault group compared to a fault-system group in otherwise identical circumstances. In no situation has the change in compensation scheme been the only significant factor affecting accident rates. In no situation have measures been repeated in a system reverting from no-fault to its alternative.

Data-gathering methods have not been reported in much detail, and have varied somewhat, but in the main consist of record reviews. There is some question about the reliability of data entry into official systems and this becomes especially important when MVA-reporting is hypothesized to be one of the behaviours affected by the type of compensation scheme.

The data have been assembled and analyzed using a number of statistical techniques. Some of these analyses have been criticized on technical grounds, and their conclusions queried because they did not sufficiently take into account a variety of possible confounding factors. However, in no instance would the effect of such criticism, if accepted, have been to change the direction of the conclusions; that is, only the magnitude of the supposed influence would be affected.

The quality of the evidence falls short of the standards required by scientific investigation, but is typical of what is generally available in the uncontrived study of natural social phenomena. Since it is exceedingly improbable that there will ever be a properly designed experiment, it is the only type of quantitative evidence we shall ever have. It should be accepted only with reservations.

C. CONCEPTS

1. Different Meanings

To address this question usefully, we must clarify what is meant by 'deterrence' and specify how it is assumed to act. If, as would seem likely, there is a number of socio-behavioural influences summarized by one term, each must be examined separately. For each, the question is: "Can increased rates be explained by the loss/removal of (this) deterrence?"

For everyone, 'deterrence' suggests that some act, event or phenomenon is being delayed, diminished or prevented. Included is the sense that something would occur but for this influence, i.e., that there exists an active tendency toward the occurrence. In the context of driving behaviour, then, the implication is that there is a tendency toward MVAs. This tendency is dampened when some hypothetical 'deterrence' is in effect, and amplified when it is removed. The implication is important because our prevention strategies are thus determined by a supposition that the 'natural' inclination of the average driver is to have as many accidents as can be gotten away with, and this supposition has by no means been proven. A subtle and problematic variant of this view is the 'risk-equilibrium theory' which involves an unconscious (both individually and collectively) weighing and adjusting of risk factors so as to maintain a fairly constant rate of calamity.

To be more clear about the construct(s) underlying the terms, we should specify the 'what' which is being deterred. Since this may not apply uniformly across the population, we must also identify the 'who'. Then, the meaningful use of the term requires that we also have a rough idea of the 'how'. To some extent, we find ourselves building a deterrence construct after-the-fact, because the word is already in use and its connotations are quite influential. This means trying to divine what people mean in using the term, even when they might not be aware of their own meanings. It is the kind of definitional exercise which leads to spirited dispute if it takes a counter-intuitive or unwelcome direction.

Amongst lawyers and judges, it is a fondly (though not unanimously) held belief that the tort system exerts some restraining influence upon community behaviour. In its most primitive form, this belief is based upon the assumption that people wish simply to avoid penalty in the form of either payment or blame. The tradition within which traffic safety researchers work has long seen economic motivation as the pivotal determinant of vehicle-related behaviour and has employed 'deterrent' as a rough antonym to 'incentive'. The economics assumption is that all behaviour reflects a balance of restraining and encouraging forces to which values can, at least in principle, be assigned. The simplest form of evaluation is monetary, but, understood broadly, the notion also encompasses 'social cost' and personal utility.

Thus, the legal and traffic safety views may converge theoretically at some point. However, particularly where liability insurance is mandatory, they differ significantly in emphasis. The legal supposition is of a relatively subtle and abstract influence upon attitudes concerning the individual's relationship with his or her social environment. The traffic safety supposition is of an influence based upon calculation of self-interest.

For both, the driver in an MVA is aware under a no-fault system that there is no process for determining non-criminal responsibility and that compensation will not be contingent upon any such determination. In the traffic safety view, the driver has 'nothing to lose' (disregarding inconvenience, physical risk, etc.) and, with the balance of disincentives and incentives having shifted, the invisible economic hand will push up MVA-related rates. In the lawyers' view, removing the process by itself affects community values and, hence, behaviour in a way which need not be mediated by considerations of personal loss or gain.

2. Non-Specific Deterrence

In the traffic safety literature, the terms 'deterrence' and 'general deterrence' are used interchangeably to denote a collection of influences, variably specified, which are understood to determine the probability/ frequency of MVAs. Although this deterrence involved other factors (such as quality of roads and design of circulation patterns), it is usually understood to revolve around driving behaviour. Some attempts have been made to determine the mechanisms within this behavioural 'black box', most of them leaning rather heavily upon the utility theory (sometimes in the form of an 'expected utility model', or EUM) employed by economists. The driver is supposed within this conceptual framework to compare the utilities of competing alternative forms of driving behaviour and to choose the optimum mix. Most utilities can be expressed in cost terms, and one of the approximations accepted by this way of thinking is that the 'choices' are made more or less rationally. This approach has enjoyed rather limited success in explaining actual driving behaviour.

For the purposes of this brief, to avoid confusion with the 'General Deterrence' described below, this type of accident inhibition is labelled herein as 'non-specific deterrence'. Since we know that certain activities (seatbelts/airbags, no drinking, lower speed, compliance with laws, good vehicle maintenance and defensive driving) protect against accidents, we are able to specify some of its proximate components, and even more distally to identify such systems' features as rigorous enforcement, but there has been no comprehensive model to account for these hypothesized influences upon driving behaviours.

3. Specific Deterrence

Amongst both traffic safety experts and lawyers, there is the not unreasonable belief that the experience of some driving-related misadventure will affect a driver's behaviour, usually for the better. People tend to underestimate risks to themselves and tend to overestimate their driving abilities as compared to other drivers. Accordingly, they are relatively impervious to public educational messages and other inputs which might improve their driving performance. Although the effect occurs unevenly, it has been shown that accidents, injuries or penalized infractions do tend to sensitize drivers somewhat. Since the lifetime probability of being in an accident is quite substantial, and since there appears to be some concentration of accident events in an especially accident prone driver population, it would seem useful to enhance as much as possible the 'lesson' connected with each accident event. It is also true that there is a circle of driving friends and family members around each person who has had an accident, and it can be argued that some of this lesson is not lost upon them.

To borrow from sentencing usage, this way of preventing the further occurrence of undesirable behaviour may be labelled 'specific deterrence'. It is worth distinguishing from the 'general deterrence' described below because, although there is necessarily and desirably some overlap, the social and psychological processes involved in the two forms are different. In the case of specific deterrence, our objective should be to seek the maximum behaviour-change impact from each accident experience. This is not as good as preventing the first accident from occurring, but it does involve a significant part of the driver population.

4. General Deterrence

The term 'general deterrence', as used here, is also derived from sentencing language and is intended to label a broad community effect aimed at the 'primary prevention' of accident-causing behaviour by everyone, especially those who have not yet been 'offenders'. Although it could be hoped that this influence would also be felt by people who have already been in accidents, its main target is amongst those who have not yet been sensitized in this way.

This general community deterrence held to be one of the proper functions of the tort system occurs through a complex and subtle inculcation of norms, expectations and proprieties; that is, its most important effect is upon attitudes about standards of behaviour and obligations to one's fellow community members. The process is not well understood, but it must be less direct, more diffuse, and slower than those of either the non-specific or specific types. In broad terms, the 'what' is accident-producing behaviour and the 'who' is the not yet accident-affected driving public. To understand general deterrence usefully, the genesis of driving behaviours must be traced, which will give some indication of the 'how'. It is worth noting that embedded in the term 'deterrence' when applied to MVA production, there is a double negative: we are speaking of preventing a negative behaviour when we could as easily be speaking of promoting a positive one.

A description of general and specific deterrence, linked to models of MVA production and driving behaviour, is presented in Section E: "DETERRENCE AND DRIVING".

D. THE ARGUMENT

1. Illusory Proof

Superficially, it would seem that the data do support the idea of the existence (or removal) of 'deterrence'. There are good dialectical and theoretical reasons for believing that the tort system does exert some influence on the direction of socially responsible behaviour and there are measures which, while scientifically imperfect, do consistently show increased MVA-related rates with the institution of no-fault systems. It would be mistaken, nonetheless, to take from these studies that the data prove anything with respect to deterrence. It is as if we had been offered a hypothesis: if fault-finding in the tort system deters, then its removal will be followed by (result in) increased MVA-related rates. When rates do go up, the data are taken as confirmation of the deterrence proposition. This confirmation then, somewhat circularly, provides an explanation for the data.

2. The Non-Specific Association

For non-specific 'deterrence', there would seem to be the most compelling case, but it is based upon a semantic confusion. Recall that, as used by traffic and safety people, this form of the term implies a shift in the balance of restraining and encouraging forces (or of disincentives and incentives), with the implicit and unsupported assumption that the shift is occurring because restraints or disincentives are being reduced. With a more sophisticated formulation, the model becomes explicit and the language changes: we have an 'MVA production system' of which some variables change in response to altering conditions within the system.

If it could be shown convincingly that, with confounding variables controlled or eliminated, there were repeated and consistent increases in MVA-related rates following the institution of no-fault schemes, then it would be prudent to infer some causal relationship. However, even under these circumstances, we could say nothing about the role of 'deterrence' in its other meanings. Since confounding variables have not been controlled, and since we have not seen the opposite effect in response to the imposition of a fault system, we are not in a position to conclude very much at all. We must keep in mind that we are considering a very large system with an enormous number of elements and exceedingly complex interactions: to infer causality between one (amongst many) local system change and another event at a different level of organization, after so few trials, would be incautious.

One persuasive argument in support of which there is much anecdotal evidence is that businesses can and do calculate risks and, thus, may be deterred from exposure to fault for simple economic reasons. To assume that the same reasoning process governs individual driving behaviour is not valid.

3. An Alternative Assumption

Without the presupposition of some 'deterrence', one might not think first about the removal of a restraint when a no-fault scheme is introduced and rates go up. It would be at least as direct and logically parsimonious to presume that some factor(s) had been added to the MVA production system. Arguments have indeed been made for the contribution of such 'new' factors as an increase in the proportion of high risk drivers in the licensed pool and changes in reporting behaviours. There might, of course, be a combination of 'added' and 'subtracted' factors. Since step-by-step controlled research is impossible, it would be exceedingly difficult to apportion causal responsibility between such factors. If they interact (so that, for example, the removal of a deterrence selectively influences the sub-population which has been given freer access to driving privileges and which exhibits more labile reporting habits), then the difficulty is aggravated.

4. Data Collected Before the Effect

The greatest problem, specifically with respect to 'general deterrence', arises from the fact that the 'post-change' data have all been collected during a relatively brief (generally one year) period immediately following the change in compensation scheme. For it reasonably to be believed that increased MVA-related rates support a (general) deterrence hypothesis, one must assume that the effects of a hypothesized restraint removal would be evident within this early period. This issue is addressed in the following section.

E. DETERRENCE AND DRIVING

1. How Does Deterrence Work?

It would probably be useful, within the whole realm of 'deterrence', to see two kinds of influence directed toward two essentially different populations. These correspond roughly to the 'general' and 'specific' varieties of deterrence, but they are qualitatively more different from one another than are these kinds of deterrence in a criminal context. An important problem with the term 'deterrence', as noted above, is that it carries the connotational baggage of temptation. It is as if there were something naturally and fundamentally pleasurable, valuable and desirable about doing and being the things which lead to the production of MVAs. There is an analogy in public health work, where prevention programmes must combat the belief that there is something intrinsically pleasurable, and therefore tempting, about smoking, poor diet and sedentary lifestyle. These latter two having been designated sins ('gluttony' and 'sloth') in our socio-religious traditions, have acquired a kind of perverse value. In fact, to acquire a tobacco addiction requires withstanding and overcoming a good deal of unpleasure; healthy nutrition is demonstrably more pleasant than its alternatives, and increasing legions of the newly-fit attest to the preferability of an active lifestyle. Health promotion must work against the peculiar prevailing assumption that one must sacrifice pleasure to feel better.

In the driving world, the parallel assumption is that the fewer the constraints, the less attention to sound driving technique, and the less regard for the welfare of others, the more enjoyable driving would be. There is, in this view, a kind of animal urge struggling to get out from beneath a wet blanket of social restriction. It is the inclination to give free rein to this urge which is being deterred.

The urge may exist, but it is not 'natural', in the sense that it is the inevitable expression of something essential in our driving natures. It is a socio-cultural artifact, about three-quarters of a century old, which has been assiduously and expensively cultivated by huge commercial interests. (The parallels with the tobacco and food industries are compelling.) If there is an inclination to drive recklessly (sportily, adventurously, masculinely), then to create a social apparatus aimed at the constraint of an unfortunate aspect of human nature is to use the wrong arrow for the wrong target. It would make more sense to constrain those interests (the auto manufacturing and auto sport industries) which propagate the myth.

If we adopt a health promotion-like viewpoint, then general deterrence begins to look less like the inhibition of essentially tempting proclivities and more like the encouragement of potentially pleasurable, or at least neutral, safety-generating behaviours. The temptation-and-enforcement point of view supposes that there will be a necessary resistance to the acquisition of good driving habits, so that the teaching must have teeth in it. To see general deterrence as a positive process of encouragement, rather than a negative one of suppressing tasty mischief, has important implications for how we understand the impact of the tort system on driving behaviour. We then appraise the role of the tort system as a guiding and teaching instrument, rather than a mechanism for the distribution of penalty. It means that we assume, as would seem appropriate, a higher level of community moral development wherein the adherence to principles is more important than the avoidance of penalty.

The 'specific deterrence' notion, in its usual sense, is strategically identical to a good spanking. Here too, there is the hint that something worthwhile to the individual is being made unavailable in the interests of the community. Whether or not some accident producer-victims might have a taste for unsafe driving behaviours, however, the general descriptive statement about this population is that they have proven themselves at higher risk than the remainder of the driving population. Therefore, if we understand driving behaviours to be the products of many complex interactions, the reduction of this accident risk potential would properly consist of addressing several or all of them. To adopt the strategic presumption that the only 'cause' is the giving-in to selfish temptation would result in a very narrow approach. Yet, since there is an expert consensus that driver attitudes are central to this whole MVA production system, there would seem to be considerable merit in 'teaching a lesson' to these drivers, if it is understood to be more pedagogic than punitive.

The suggestion here is that for our purposes we consider what has been called 'general deterrence' as (part of) the encouragement of safe driving patterns in a way which is closely akin to health promotion. We should also re-define 'specific deterrence' so that we understand it as the re-education or rehabilitation of drivers whose accident-hood has shown them to be members of a high risk population. For the reduction of MVAs, the two populations require different approaches just as, for example, the prevention of first smoking requires a different approach from that needed for cessation. Although defining these populations solely on the basis of accident occurrence is crude, it is for now the best way we have.

If the tort system has a role to play in reducing MVAs, a role which until now has been known as 'deterrence', it will be along the lines of these promotion and rehabilitation influences. To the extent that the tort system actually is deterring people from giving into temptation, it must be emphasized that this temptation is being deliberately produced by another social institution.

2. Accident Production and Driving Behaviour

There have been hundreds of models proposed to account for the behaviour of traffic systems and of the drivers involved. Many of them directly or indirectly purport to account for variations in safety; i.e., for varying probabilities/frequencies of MVAs. These models have a variety of structural features and are based on a number of theoretical positions. However, they share certain features, and there have been discernable trends over the last couple of decades, so that it is possible to offer a modern composite depiction, which can claim to express the consensus of the field. What follows is a rough outline of such a summary model.

There are five main elements which interact to produce MVAs: the traffic-circulation system, vehicle characteristics, laws and their enforcement, geophysical conditions and driver behaviour. The interactions between these elements are subtle and complex (e.g., vehicle designs/sales adapting to road conditions, and road design adjusting to size of vehicle), and all except geophysical conditions are socio-culturally determined, but the one most germane to this discussion is driver behaviour. It interacts with all of the other four elements although, in the case of geophysical conditions, the interaction is only in one direction. It is necessary to recognize the sub-components of each of these elements because the interactions are sometimes between them.

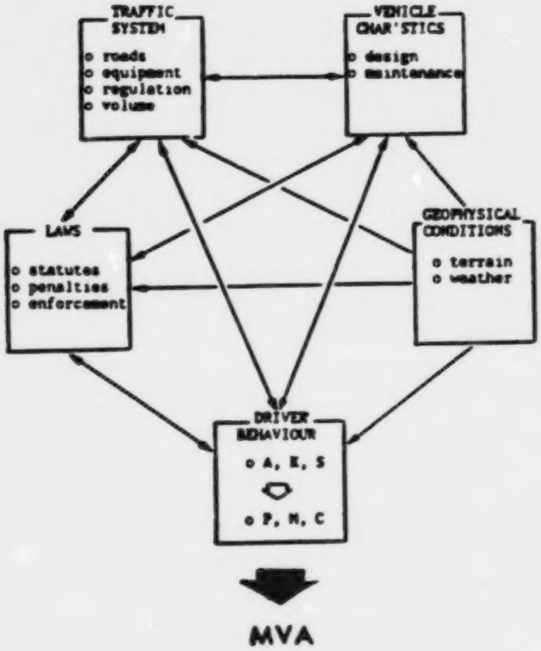
TRAFFIC SYSTEM
o roads
o equipment
o regulation
o volume
VEHICLE CHAR'STICS
o design
o maintenance
LAWS
o statutes
o penalties
o enforcement
GEOPHYSICAL CONDITIONS
o terrain
o weather
DRIVER BEHAVIOUR
o A, K, S
o P, M, C
MVA

FIGURE 1: A simplified composite normative model of the MVA-production system.

A great deal of work has been done on the determinants of driving behaviours, focusing upon physical attributes, skills and, increasingly, cognition. Included in cognition are perceptions, judgments, interpretations of events, emotional reactions and attitudes. These all interact (indeed, in the view of many cognitive scientists, are operationally inseparable), and their general direction is believed to be governed by a combination of role and attitude. That is, a fundamental (perhaps the fundamental) determinant of the quality of driving behaviour is what the driver senses her/his driver-role to be, together with the attitudes linked to that role. It is this role/attitude factor which safety campaigns and driver education courses attempt to influence with, at best, qualified success. The difficulty in affecting this cognitive factor is believed to be that it is already formed by the time driver training occurs, and is more strongly affected by general community influences than by specific interventions.

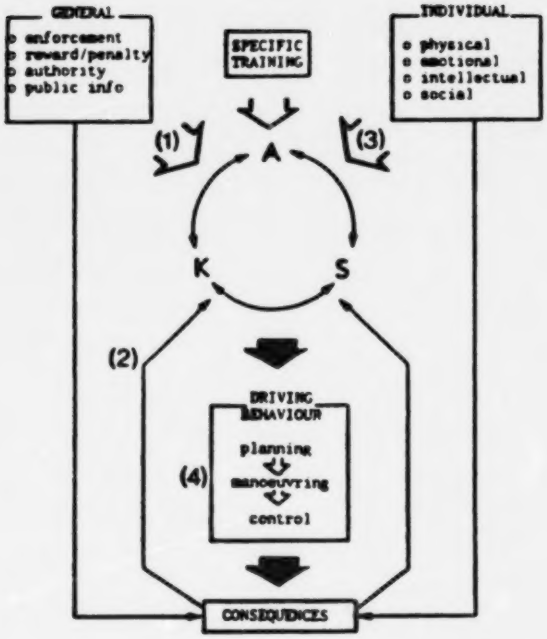
GENERAL
o enforcement
o reward/penalty
o authority
o public info
SPECIFIC TRAINING
INDIVIDUAL
o physical
o emotional
o intellectual
o social
(1)
A
(3)
K
S
(2)
DRIVING BEHAVIOUR
planning
(4)
manoeuvring
control
CONSEQUENCES

FIGURE 2: The determinants of driver behaviour, based upon the interaction of attitudes (A), knowledge/beliefs (K), and skills (S).

In Figure 2 (page 451), actual driving behaviour results from interactions between three clusters of individual attributes: attitudes, knowledge/beliefs and skills. The 'attitudes' include the person's sense of identity/role as a driver (e.g., warrior, athlete/competitor, adversary, cooperator, etc.), estimate of risk, assumption of responsibility and so on. The person's knowledge/beliefs range from obvious rules of driving to knowing correct tire pressures. Skills involve motor skills, procedural habits (where to look when changing direction), reaction habits (modulating strength of response to urgent demand) and thought-mediated problem-solving. These clusters are not mutually exclusive as there are cognitive skills (between knowledge and skills), automatic responses based in habitual evaluations (between skills and attitudes) and philosophical convictions (between attitudes and knowledge).

This interactive AKS-complex is affected by general factors in the social environment and by personal factors. The general factors include law enforcement, fiscal rewards/penalties, the views of authorities and public information/education. Personal or individual factors include physical, emotional, intellectual and social attributes.

The actual driving behaviours can be arrayed hierarchically and, thus, seen to be involved in Planning (most general), Manoeuvring (intermediate) and Control (most specific). Planning requires at least minutes, but can last much longer. Manoeuvring occurs within seconds. Control occurs within fractions of seconds. Any complex repetitive task becomes increasingly automatic and the less time there is to think about such a task, the more adaptively necessary it is for this automaticity to occur. This means that the first behaviours to become automatic are at the 'control' level, and the last at the 'planning' level. Automatic behaviours are relatively stereotyped, occur by 'training' and, in psychological terminology, are often 'over-learned'. It is important for them to be safe for the widest possible range of circumstances. During their development, they are heavily determined by attitudes. Then, once established, they actually influence the beliefs and attitudes which complement them.

The figures and institutions in our society who are invested with sapiential and moral authority teach, guide and set standards in many realms of behaviour. The courts have a central role here but, besides judges and attorneys, there are accountants, physicians, law enforcement personnel and the media, who all deal with the consequences of MVAs and have this 'General' influence on the AKS complex (see #1). Public information, through health agencies, ministries and schools, also has an impact upon knowledge and attitudes and is aided by the background presence of a concrete social instrument for determining the correctness of driving behaviour. The consequences of driving behaviour, whether right behaviour or wrong, and whether actual or anticipated, have a lot to do with subsequent driving conduct. Here again the institutional reality of a rightness-judging process strengthens this feedback (see #2).

As the norms, expectations and proprieties permeate the social character of the community, they affect the openness of individuals to benefit from training, be sensitive to information and respond adaptively to driving experience (see #3). The hope is that these attitudes will be influential at the 'planning' level where risk avoidance is most effective, at the 'manoeuvring' level where role identity, personality and emotional tendencies are expressed, and in the formation of the pre-learned habits which come into play at the 'control' level (see #4).

3. Social Attitudes and the Fault System

The most desirable cognitive set for a driver to take behind the wheel is that of a socially responsible community member whose obligation is to perform driving functions in a technically correct and vigilantly cooperative manner. This set includes a sense that one is accountable to the people in one's environment for one's behaviour. It means the self-discipline (a moralistic way of referring to a habit) to maintain an awareness of risk to others. It requires a shared folk-knowledge that there are means and ways by which this accountability may actually happen.

People generally perceive three kinds of liability connected with driving: criminal, 'quasi-legal' and civil. Studies suggest that all but a tiny minority of us regard ourselves as non-criminal, and the criminal justice system is therefore irrelevant to us. The 'quasi-legal' area includes, notably, most traffic offences. People are more inconvenienced than either embarrassed or threatened by the usual offences and fines which are regarded as routine costs of transportation. Being 'at-fault' in making an illegal turn has little emotional impact. Auto accidents, on the other hand, are major emotional events and the prospect of being held blameful in such an event is not unimportant. Thus, although the sanctions may be least tangible (if an insurer pays), the average citizen-driver is most influenced by the possibility of civil liability.

If it is accepted that the 'correct and responsible' role is important for the prevention of motor vehicle accidents, then the values and attitudes supporting this role are correspondingly important and anything which, in turn, promotes them is strategically valuable. The tort system performs this function. People in our society can see in it a demonstration of how we value each other and of what the rules are by which we are held accountable. That is, it is a representation of one's responsibility to the community.

The trial-in-court part of the tort system is a crystallization of that responsibility-fact. One stands before one's fellows to be judged blameless or at fault. It is a fundamentally important form of civic theatre where we represent ourselves to ourselves. What has come down to us as 'drama' and is now considered one of the arts, was originally created for just this purpose. Originally (and now in other societies) religious, legislative and judicial dramas were 'acted out' together. In our current society, we separate these functions into churches, legislatures and courts. In each, we are accountable to a higher authority upon which our community agrees, but we have separated the authorities. Because the tort system has this representational function, it is less important because of what it does than because of what it is. It is our final referent when we are trying to understand how to resolve social conflicts or how to make real some abstract notion of one's responsibility to others in the community.

This representational influence is slow and indirect. It contributes, over the long term, to that sense of collective obligation which is the basis of the civility for which Canadian society is noted. It is a kind of drama which need not be dramatic. It need not even be particularly visible. Another institution in this country, the office of Governor-General, has day-to-day impact on the lives of Canadians, though we are seldom aware of it. We distinguish our Head of State from our Head of Government with the result that the citizens of this country have at least a vague sense that our Prime Minister is, however powerful, still accountable to someone/something else. The person elected to be first amongst us has to regard himself as accountable through an institution which is more important for what it is than what it does: so too, the lesson goes, does each of us have to feel responsible to our community.

At first glance, then, the argument that the tort system has a 'deterrent' influence would seem to depend upon public awareness of how the system works and upon each potentially accident-producing individual making a personal risk calculation in the context of that awareness. Although there are no studies of the level of public awareness of the tort system, one survey suggests that despite recent campaigns, public awareness about the penalties for drunken driving is minimal. It is reasonable to suppose that detailed knowledge about what happens in civil litigation is scanty. The informal experience of lawyers with new clients, and in the community, confirms this supposition. It appears that if the tort system does have an influence it is not mediated by even a latent knowledge about, much less a constant awareness of, its workings.

The idea that drivers make personal risk calculations is problematic. A great deal of traffic safety research indicates that quick driving decisions are made, without conscious thought, on the basis of a combination of physical factors and habit. The motivating direction for such 'reactions' (rather than 'decisions') is personal survival, followed by the survival of others and the protection of one's vehicle. In most acute situations, there is no time to perform calculation, even if a person were able and inclined to do it. Traffic safety promotion is really based upon the idea of keeping people out of such situations in the first place; that is, by focusing upon planning and manoeuvring. This is where social perceptions, attitudes and roles come into play.

However, even if most drivers do not actually think about the workings of the system, their behaviour is affected by something like a pre-verbal impression of what it is and, particularly, of their place in it. This sense of relation is important because in the study of institutional and community behaviour, it has been found again and again that people who have a personal stake in events behave more responsibly. A complementary finding has been that cooperative behaviour is increased when a person perceives those around him as sharing that stake. This makes it crucial that drivers maintain a sense of 'ownership' in connection with the issue of traffic safety. It must remain personal, rather than being allowed to become a de-humanized administrative mechanism. The possibility, even (perhaps particularly) if a bit abstract and mysterious, of being personally accountable increases this personalization. The personal connection, making it more difficult for the driver to evade a sense of road responsibility, would be enhanced if the consequences were made more concrete and severe (as in, e.g., increased insurance premiums and, especially, punitive damages). For the specific-rehabilitative kind of 'deterrence', they would serve to capture the driver's attention and encourage a private re-appraisal of habits and attitudes. For the general-promotive kind of 'deterrence', their existence has more effect than their application. For everyone, they affirm the seriousness with which society regards this matter.

The point is that if the existence of the tort system exerts an effect through its functions in representing collective responsiblity to the community, we must expect that its effects would be subtle, complex and slow. The elimination of this institution on a Friday would not be reflected in altered social attitudes the next Monday morning; nor, if a 'fault' system were eliminated in one year, should we expect the absence of its influence to be evident the next. If changes in social attitude were to occur, it might not be for five years, a decade or a generation.

There are examples around us of other comparable changes in social attitude which have occurred over a similar period. It has taken three decades for well-documented and widely circulated knowledge of tobacco hazards for smoking to become regarded as anti-social behaviour. It has taken two decades for substantial changes to take place in the status of women in our society. The social unacceptability of drunk driving has occurred over one decade. We do not know how long it will take to change our private transportation system so as to reduce the carnage of perhaps the greatest epidemic in history. If there are existing social attitude promoting forces which act as a brake on this slaughter, we also do not know how long it would take for their removal to show in increased traffic-death statistics.

4. The Ultimate Issue: 'Deterrence' and the Epidemic

The deaths, injuries and costs from motor vehicle accidents constitute one of the great epidemics in history. In our society, given the ages of many victims and the consequent loss of healthy years, it can be argued that it is the greatest epidemic. In this epidemic, there are no exotic organisms and natural forces play a minor role. Prevention will be mostly behavioural and the key behaviour is that of the driver. There is virtually no disagreement that the most important influences on driver behaviour are socio-culturally determined attitudes and roles.

There are several cultural influences working in the wrong direction. Macho advertising and (industry sponsored) auto-racing both promote the view of driving as a competitive, ego-displaying opportunity for self-gratification through the demonstration of strength and status, and glorification of individual risk-taking. We need some competing influences, such as education, restrictions on 'lifestyle' advertising and the elimination of auto 'sport'. Behind all our efforts to promote the 'competent and responsible' driver role, however, must be the living fact of a cultural apparatus which concretely represents our accountability for what we do with our vehicles.

Given the colossal scale of this epidemic, it would seem imprudent to tamper with an institution which may exercise some mortality and morbidity retarding effect, even if the effect is not empirically demonstrable. No one has ever proposed that it has a negative effect. Arguments related to the ultimate death and injury issue strongly suggest in fact that we strengthen, rather than weaken, the impact of the 'fault system'

F. HEALTH IMPLICATIONS

1. The Four Types of Argument

a. Efficiency: The most thoroughly argued case for, and against, the introduction of a no-fault scheme has to do with the cost of administering the system, the proper distribution of this cost, the waste of scarce court resources and the inappropriate allocation of resources to insurance companies and lawyers. It is interesting that so much time and media space should have been devoted to this aspect of the dispute (although perhaps not surprising, since the companies, ministries and professionals choreographing the dispute are organized around these fiscal concerns) because, in the long term, this is probably the least important of the arguments.

b. Fair and Timely Compensation: Probably the larger part of the emotional force behind the no-fault debate has risen out of an entirely commendable developing social sentiment that accident victims should not be deprived of compensation either because of litigation delays or because they have been found at fault. Behind this argument is an indignant sense that compensation mechanisms are unfair and unncessarily complicated. Because there are interests which appear to be profiting from the delays, there has arisen a kind of reform zeal which tends to confuse the efficiency and compensation questions. The ferocity of arguments in this category is striking and they command our sympathies, but it is inappropriate that they dominate the whole debate, because problems around which they revolve would seem so easily solved.

c. The Epidemic: One of the two types of argument which has received virtually no attention has been that concerned with the unutterably awful human damage occurring every minute of every day in our road system. Virtually all considerations should pale beside this one. Our first concern should be to ensure that nothing is done to our system which worsens the problem and, if at all possible, that we effect changes to reduce it. If this were to increase costs then the debate should explicitly address 'health efficiency' issues. Although this may be one of the greatest epidemics in history, it is probably also the most invisible, which may account for this argument receiving so little attention.

d. Justice: Except from some jurists, there has been relatively little comment upon the broad social implications of tinkering with the law involved in this issue. The general public seems perversely uninterested in suggestions that they should be wary of having their rights shaved away in the interests of efficiency, and the zealots view such suggestions from lawyers as self-serving. Despite the lack of attention given them, the justice and epidemic arguments would seem to be the most fundamentally important.

2. Compensation Mechanisms

When someone has been injured in an MVA, he/she needs two kinds of 'compensation': the wherewithal to live decently, if his/her income has been interrupted or there are other unusual circumstances; and treatment-rehabilitation. Not only is it unfair for these to be withheld but, because of the ways we know that chronic disability develops, there are also serious ill-health consequences flowing from such delays.

However, there are simple administrative means by which adequate maintenance and care can be provided without any substantial changes to the fault system. Treatment and rehabilitation should be made available, without challenge by the paying insurer, immediately. This very probably will result in some excessive and avoidable 'front-end' costs, but they will be trivial in comparison to savings from the present costs of chronic disability. There would also be legal remedies available where abuse occurs. It is argued by some that since virtually everyone in Ontario is insured through OHIP, the 'care' part of this issue is already resolved. Unfortunately, much of the specific expertise most necessary in post-traumatic treatment and rehabilitation involves non-physicians, and should generally be applied in the community rather than the clinic, i.e., OHIP does not cover it. It is also, not just coincidentally, in short supply.

Seemingly, an obvious and simple solution would be to make changes in OHIP. However, even disregarding the boggy business of extending health disciplines privileges, we could face serious utilization problems because income maintenance almost inevitably would be tied to rehabilitation efforts. The New Zealand experience would suggest that if early rehabilitation (or 'pre-habilitation') were made close to mandatory, there would be a significantly increased demand for services, mostly in non-physician activity. Costs, then, might not simply be relocated, but actually increased. To some extent, this increase would reflect 'uncovered' existing needs, but some of it would be newly created by the 'medicalization' of disability. It would not be sufficient, therefore, merely to increase the supply of conventional medical/clinical resources; service modes, professional roles and training programs would have to be adjusted according to the most advanced concepts of disability. Strategically, legal and administrative issues are inseparable from health issues. Together, they demand an integrated approach.

3. Changes in Concepts: Disability, Work and the Courts

Amongst the fundamental changes occurring in health care are our ideas about the nature of morbidity in general and, specific to our present purposes, of disability. Between the initial accident event and the eventual disability, there is a regular causal sequence, the logic of which is crucial to our understanding of how to manage these problems.

First, the 'cause' (in the form, say, of collision impact) interacts with the physical characteristics of the person to produce the tissue-metabolic damage we refer to as a 'lesion'. Then, this lesion interacts with the person's emotional-behavioural characteristics to produce the 'syndrome', which consists of all those distresses and dysfunctions we regard as symptomatic. This syndrome then interacts with the person's environment to produce the actual 'disability'.

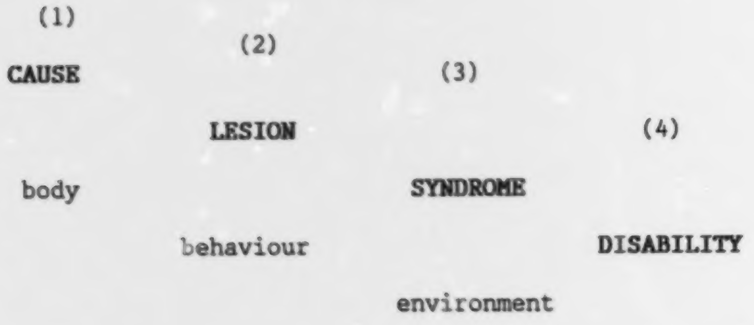

FIGURE 3: **The step-wise genesis of disability.**

Describing and assessing a disability is not the same as diagnosing a syndrome. Doctors are good at naming syndromes and inferring or finding the lesions which underlie them. They do this on the basis of history, clinical science and laboratory investigations, all of which procedures are carried out in a clinical setting. Conventionally, when asked to estimate someone's disability, they extrapolate from this diagnostic decision, sometimes including their best guess about the person's environment. When the patient in question is a professional athlete and has suffered a traumatic below-knee amputation, the guess and the extrapolation are easy. In the overwhelming majority of less obvious cases, however, neither the guess nor the extrapolation is of much value if the intention is to arrive at a precise assessment for either rehabilitation or compensation reasons. Physicans seldom possess the conceptual or technical tools because they are not trained in them, to conduct this kind of assessment properly. The data necessary for it are different from clinical data and they must be interpreted using a different kind of logic. The data gathering must be done largely in the person's real world and involves technical procedures which are quite unfamiliar in most clinics.

In parallel with this evolution or morbidity theory, there have been important changes in concepts of work and its place in our society. On the one hand, formal employment is recognized to be valued beyond the wage it brings and, on the other, informal ('avocational') work is increasingly seen as its social and economic equivalent. Social scientists in the field lean toward a consensus that substitutes for traditional job roles will become more necessary and valued and that this trend is accelerating.

Combining these developments in the concepts of disability and work, particularly where they converge around the 'value' of performance capacity, we can, within a decade, expect a very different logic to apply to the calculation of loss. This kind of thinking has only recently come into civil litigation and is evolving rapidly. Different kinds of assessment are being sought, the legitimacy of different lifestyles is acknowledged, and such hoary notions as 'traumatic neurosis' are being challenged. The quality of science brought into court, and its application, are improving, not least because, in the competitive dynamism of the system, innovative attorneys are pushing one another to new levels of sophistication.

To freeze or retard this process would be regrettable. Even if compensation criteria were to be formulated according to the most advanced current thinking in the field (and it is improbable that we could do better than to codify what was state-of-the-craft five years ago), it would be significantly out of date within a few years. Given the usual half-life of complex legislation and regulation, we would be in for a long period of institutionalized obsolescence. Right now, the civil litigation process is not only benefitting from, but is also one of the most important stimuli for, this development of concepts at the interface between science and society. Reducing our decisions about the nature and value of disability, or about impacts on life quality, to administrative interpretations of tabulated definitions would be a regressive step. It is the approach itself, rather than just the quality of its contents, which is dangerous. Once in place, it is likely to breed bureaucratic absurdity. Attempting to modernize a verbal threshold formula, as in the Michigan example, can bring about silly results. There, in order to soften an inclusion criterion which insisted upon objective clinical evidence, thermographic data were allowed: the intention may have been laudable, but the results were scientifically indefensible, and a good cross-examining attorney could demolish the logic in short order.

The civil litigation process is serving us well as a crucible within which social and scientific ideas are brought together around questions of compensation. We should be very cautious about removing any of it.

G. SUMMARY

1. Although MVA-related rates do appear to rise following the introduction of no-fault schemes, it is not valid to infer that this effect is due to the removal of some anti-MVA 'deterrence' in any meaningful sense. Nonetheless, there are other reasons to believe that the tort system can/does exert both 'general deterrent' and 'specific deterrent' influences which act over a longer period.

2. The data suggest (but do not prove) that some features of no-fault schemes may actively influence driver behaviour negatively; that is, increases in post-change MVA-related rates are at least partly an active effect, rather than being due to the removal of some influence.

3. The question about 'deterrence' cannot be settled scientifically.

4. There are (at least) three meanings for the term 'deterrence': one refers to the balance or interaction of all forces in the 'MVA production system'; the other two resemble the general and specific deterrences in the criminal justice system, but are better thought of as influences for the promotion of safe driving and the rehabilitation of high risk drivers.

5. The tort system probably does exert these 'promotion' and 'rehabilitation' influences.

6. These influences can be located fairly specifically in an MVA production system model.

7. There are strong forces acting to generate precisely those behavioural tendencies which we seek to deter.

8. The influences act, and effects occur, slowly; that is, MVA-related rates measured during the first year after no-fault changes may be interesting for other reasons, but are unlikely to have anything to do with the 'promotion and rehabilitation' kind of deterrence at issue here.

9. Given the colossal scale of the traffic death and injury epidemic, even a small 'deterring' influence is important; since the tort system probably has this influence, and has never been accused of having the opposite effect, it would be unwise to remove it.

10. Improvements in mechanisms for provision of care are possible, and desirable, independent of changes in the 'fault' system.

11. The rapid evolution of disability concepts must be considered in designing a compensation scheme.

INCENTIVES FOR SAFE DRIVING AND INSURANCE MANAGEMENT

An evaluation of the comparative feasibility and effectiveness of incentive programmes for safe driving in the general population under conditions of publicly- versus privately-administered automobile insurance.

Report Commissioned by and submitted to the
Inquiry into Motor Vehicle Accident
Compensation in Ontario

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August, 1987

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SUMMARY

In the current debate in Ontario about the merits of private and public automobile insurance, little attention has so far been paid to the potential implications for road safety. In an attempt to fill this gap, this paper first describes the road safety strategy from which the largest reduction in the accident rate may be expected. This strategy takes the form of extending incentives to drivers for not becoming involved in an accident of their own fault. Next, potential sources of incentives available under the condition of private insurance are compared with those available when automobile insurance is assigned to the public sector. To be maximally effective, incentive programs must meet a set of requirements, and these have been specified. The ability of private and public insurance to fulfill these requirements has been compared. On the basis of the available evidence and the inferences that follow from it, this paper shows that the choice between private and public insurance may have major implications for the future traffic accident rate in the province. Consideration of all identified factors impinging upon the effectiveness of incentive programs, and thus upon accident reduction, leads to the conclusion that the objective of road safety promotion will be best served in Ontario if the responsibility for automobile accident insurance is assigned to the public sector.

RESUME

Dans les débats actuels en Ontario a l'égard des avantages d'une assurance automobile privée ou gérée par les autorités publiques, tres peu d'attention a été dévoutée jusqu'ici aux implications potentielles pour la sécurité routiere. En visant a remplir cette lacune, ce rapport donne en premier lieu une description des mesures pour la promotion de la sécurité qui promettent le plus grand effet bénéfique. Celles-ci sont les mesures qui récompensent les conducteurs pour la conduite sans accidents dus a leur propre tort. Par la suite, la disponibilité des sources potentielles de récompenses ("boni") pour la conduite sure a été comparée dans la condition d'assurance gérée par le secteur public et par le secteur privé. Afin de pouvoir réaliser le plus grand effet sur la sécurité, les programmes de récompenses doivent répondre a un ensemble de criteres. Ces criteres ont été identifiés et les

alternatives d'assurance privée et publique ont été comparées quant a leurs capacités de satisfaire a ces criteres. Sur la base des résultats empiriques en évidence et des réflexions auxquelles elles donnent raison, ce rapport démontre que le choix entre l'assurance publique et privée englobe des conséquences importantes pour le taux d'accidents dans l'avenir. La considération de tous les facteurs identifiés qui ont un effet sur l'efficacité des programmes de récompenses pour la bonne conduite automobile, et ainsi sur la réduction des accidents, amene a la conclusion que l'interet de la sécurité routiere en Ontario sera mieux servi si la responsabilité pour l'assurance automobile est déléguée au secteur public.

1. INTRODUCTION

Some time ago, professional drivers of a large fleet of trucks and vans employed by a food-producing company were promised a salary bonus of a few hundred dollars for each year in which they did not cause a traffic accident. The accident rate per driver, as well as the accident costs per kilometre driven, dropped drastically in immediate response to the announcement of this safety incentive, and several years later both levelled off to about one-seventh of what they had been before the institution of the incentive program.

The purpose of the present report is essentially twofold. The first purpose is to call attention to what appears to be the most effective strategy toward accident prevention by describing the sizeable reduction in the number and costs of traffic accidents that may be expected from those intervention programs that take the form of extending rewards to automobile drivers conditional upon the fact of not incurring accidents in which they are judged to be at fault.

The second purpose is to contrast both the degree of feasibility and the extent of the potential safety impact of launching such incentive programs under two different conditions: when automobile insurance is under public management and when it is offered by the private sector.[37] It will be seen that the differences in the to-be-expected reductions of the traffic accident problem are likely to be substantial. In this comparison, issues other than road safety promotion will not be considered.

The societal importance of reducing the traffic accident problem is immense indeed, as may be illustrated as follows. It can be calculated that in the year 1985 the economic costs of road accidents in Ontario amounted to some $1.2 billion, or $131 (Canadian) per head of population, meaning all men, women and children living in our province, and not just drivers.[1-2] Traffic accidents are among the leading causes of death in Ontario and are even the most prominent one in certain age groups.[3] In contrast to cardiovascular disease and cancer (the dominant causes of death in the population as a whole), road accidents kill people at a relatively young age. It has been estimated that in Canada, road deaths account for 1.7 times more potential years of life lost than is true for cancer and 1.2 times more than due to cardiovascular disease.[4-6]

It should be recognized, too, that in addition to carrying this burden of material loss and human suffering, our province spends large resources on road safety management in various forms, ranging from driver education, licensing and record keeping to traffic law enforcement, court operations and jailing, road construction and maintenance, intersection signalization and railway-crossing level separation. The total cost of road safety management to the province is probably unknown, but it certainly is substantial.

Against this background, it readily becomes obvious that any proposed change in operation that has a potential impact upon the traffic accident loss in our province deserves to be carefully studied with regard to its likely repercussions on safety. The current political debate in Ontario about the merits and disadvantages of private versus public automobile insurance entails a possible change in operation that may have a major impact upon traffic safety. So far, however, the traffic safety issue has not been a salient topic in this debate; that it deserves to be is emphasized here.

The present report is structured as follows. The empirically evaluated effects of various past incentive programmes upon traffic safety have been summarized in Section 2. This section also contains a short review of what may be learned for the purpose of traffic safety promotion from the documented experience with analogous programmes in industrial settings. From the combined evidence, a set of requirements for the design of effective incentive schemes is derived in Section 3. Potential sources for incentives are discussed in Section 4 and compared under the conditions of private versus public responsibility for automobile insurance. Section 5 evaluates the comparative opportunities for effective safety promotion under these two conditions against the yardsticks specified in Section 3. Finally, Section 6 contains the conclusions that can be drawn from the evidence and considerations presented.

1.1 A Note on Terminology

In order to avoid long-winded phrases which might be more precise, we will, in this report, take some terminological shortcuts. Unless otherwise specified, accident cost refers to the sum total of accidents occurring in a jurisdiction as a whole or in a sub-group of road users in particular, while each accident (fatal, personal injury or property damage) is weighted according to its severity. The sum total of accident cost, when calculated per calendar year and divided by the number of residents, yields a per capita accident rate. This accident rate is different from the accident rate per kilometre of mobility and should be clearly distinguished from it.[7]

The term 'incentive for safe driving' refers to a gratification or bonus extended to drivers on the condition that they do not have an accident, in which they are at fault, within a specified time period (like six months or one year). 'Incentive' is different from 'reward' or 'reinforcement' in that drivers are fully informed in advance of the requirements they have to fulfill in order to become eligible for its realization at some specified time in the future. In contrast, a 'reward' is something that may come unexpectedly. An incentive is intended to stimulate people to achieve a particular performance, while its realization into a bonus should satisfy a need or desire.

Note that, in order to be eligible for the bonus, the driver should be free of accidents in which he or she is culpable, and not just display some specific safe behaviour (like wearing a seat belt). Similarly, disincentives mentioned in this report are penalties contingent upon the fact of incurring an accident in which the driver, to whom the disincentives apply, is found to be at fault. Unsafe driver acts or violations of the highway code will not be considered if they are not followed by an accident.[8] As incentives for not having a 'culpable' accident and disincentives for having one both constitute inducements towards safety, we will use the term 'incentive' to cover both, unless otherwise specified.[9]

2. PAST EXPERIENCE WITH INCENTIVE PROGRAMMES

In this section we will summarize the findings of various studies which examined the effect of extending incentives for safety upon subsequent accident frequency. This approach towards accident prevention differs basically from the 'traditional' emphasis upon training, enforcement and engineering, because it attempts to enhance drivers' desire to be safe, rather than merely providing them with more opportunity to be so, or discouraging them from specific unsafe acts. Moreover, it will be seen that incentives for safe operation of equipment by employees in industry have led to substantial reductions in occupational accident rates.

2.1 Incentives for Safe Driving

A well-controlled field trial, in which the expected cost of being at fault in an accident was increased, resulted in a marked reduction in the accident rate of the driver population involved.[10] Members of military personnel at a U.S. airforce base in Texas were informed that their ranks were in jeopardy and that they even ran the risk of dishonorable discharge from the service if they were found to be at fault in an accident. Referral to a psychiatrist was another unpleasant possible consequence. These measures were put into effect for one year and the results were compared with the accident rate before the measures were instituted as well as with the accident rates of military personnel at other bases (without the program) and with general trends. The authors concluded that the number of accidents of personnel at the experimental base diminished by 50%, the total frequency of personal injuries by 54% and of personal injury to the driver by 60%.

The very act of engaging in the risky act of driving (rather than being at fault in an accident) was economically discouraged in another case.[11] As a consequence of the elimination of Connecticut state subsidies for driver education in high schools, nine school boards decided to drop the courses from the curriculum, while others continued to offer them. Obtaining a driver's licence thus became more difficult and more expensive. Subsequently, the total number of licensed years of 16- and 17-year olds diminished by 57% in the communities without high school driver education, as compared with 9% in communities where this education was retained.[12] Due to the reduction in driving, the former communities showed a 63% decrease in the traffic accident rate of 16- and 17-year olds, while there was no change in this respect in the other communities.

In the mid-1970s an innovative and relatively large-scale experiment was conducted in California.[13] The Division of Highways in that state contacted 9,971 drivers who had caused collisions or committed violations in the previous year and thus had incurred recent demerit points. These drivers were informed by letter that they would receive a free 12-month extension to the validity of their driver's licences on the condition that they achieve a clean record during the forthcoming year. Apart from the financial incentive, amounting to a few dollars per year, this offer also implied deferral of the obligation to again submit themselves to the the written part of the driver's examination, which in California is administered repeatedly throughout a driver's career.

A control sample of another 9,976 drivers was not approached in this manner, but they too were followed up along with the experimental group over a period of several years. The findings include the following. In the first follow-up year, there were significantly fewer accident-involved drivers in the experimental group, particularly among the younger drivers[14] and among those drivers whose licence renewal was to come up within one year after receipt of the letter.[15] In this latter group, the accident rate was 22% lower than in the appropriate controls. The drivers who actually earned the bonus after one year showed 33% fewer accidents in the second follow-up year than did the controls.[16]

More recently, a report was published about an ongoing incentive project in West Germany that has not, as yet, received the amount of attention of the road safety community that it deserves. This project has already been hinted at in the Introduction above. Professional drivers employed by the German branch of Kraft Foods Corporation, with a fleet of about 600 trucks and vans, were told in 1957 that they would receive a bonus of about $175 (Canadian) for every half year of driving without "culpable accidents" (i.e., without accidents in which they were judged to be at fault).[17] This incentive programme is currently still in force.

In the first year after the initiation of this incentive scheme, the frequency of culpable accidents per

100,000 km driven fell abruptly by about one-third, and subsequently continued to drop more smoothly; in 1981, the accident rate per km amounted to about 14% of what it had been in 1956 (i.e., prior to the programme). The rate of all accidents - culpable or not - fell to 25% of what it had been before in 1956. The direct financial accident costs per km driven showed a steeper decline than the accident frequency per km driven.[51] This indicates that the incentive programme was particularly effective in reducing the occurrence of more serious accidents. The total implementation costs of the programme are estimated at about $40,000 (1983 Canadian dollars) per annum, but these costs are reported to be outweighed by far by the reduction in insurance fees resulting from the much improved safety record.[18]

2.2 Incentives for Safety in Industrial Settings

Occupational accidents are very costly to manufacturing, mining, construction and other industries, not only because of lost production time of employees and equipment, but also because of their consequences for payments to Workers' Compensation Boards and other forms of insurance. Insurance fees often depend on safety performance. As a result, efforts to reduce industrial accidents through monetary and material incentives to employees for accident-free operation have indeed become quite popular in North America,[19-23] as well as in other parts of the world.[24-25] It would, therefore, seem worthwhile to investigate what, if anything, may be gleaned from the documented industrial experience with a view to applying it to road safety promotion. The terrain is different, but the same principles may well apply. Thus, what follows is a short interpretive review of what can be learned from various publications on the effect of safety incentives that have been implemented and evaluated on their effect in industrial settings.

Incentive systems tend to be more effective if employees are told how (i.e., through what specific behaviours) accidents can be avoided. As the California experiment[13] indicates, this does not mean that incentives will not work if this educational component is missing, but in industrial settings it has been found to be helpful.

A very important factor in the success or failure of an incentive scheme is its perceived equity. Is the bonus seen as a just compensation for what one has to do, or refrain from doing, in order to receive it?

Is the bonus perceived as realistically attainable or is it seen as virtually beyond reach? The question becomes particularly important when lotteries are used, as is common in industry in various countries, and highly relevant to the traffic safety problem. This is because in any given year about 90% of licensed drivers are accident-free and thus would be eligible for their small share of the total incentive funds. One could alter that by rewarding, by lot, only 10 or 5% of accident-free drivers and give them a 10 or 20 times larger bonus. Although, on the one hand, this would appreciably augment the potential gains to be made by an individual driver, it might on the other hand lead some people to feel that their chances of obtaining the reward are so small that they may choose to ignore the incentive program and the change in road conduct the program is intended to inspire.[24]

Any incentive programme should be developed in consultation and co-operation with those to whom it will be applied. The need for this is obvious from the points already made. For the same reasons, people should be clearly informed as to how it operates.

The incentive should materialize after a relatively short time period, for instance twice a year (periods as short as one month have been used in industry).[19-23] It may be recalled that in the California experiment cited in Section 2.1, a greater reduction in the accident rate was found in people whose licences were coming up for renewal relatively soon after they had been informed of the existence of the incentive.

Mention should be made here of the distinction between group and individual bonuses for not having any or at least a lesser frequency of accidents. One leading authority[24] feels that if incentives are applied in a competitive fashion to groups of people in industry (e.g., work teams) everybody in the winning group should benefit, including those group members who have had accidents. This is seen as more equitable, because "nobody really wishes to have an accident". However, it should be emphasized that driving, unlike much industrial work, does not constitute team work in the usual sense of the word and that drivers actively and knowingly create situations - or more passively allow situations to occur - in which accidents are more likely. On the other hand, there is evidence that group bonuses strengthen the competitive motivation toward winning the award.

The institution of an incentive plan may lead to under-reporting of accidents, but this phenomenon appears to be limited to minor accidents only and so far constitutes the only documented undesirable side-effect of such schemes.

Many companies report that the savings accruing from the incentive systems are much greater than the monies spent on bonuses. The lowest reported ratio (savings divided by costs) is in the order of two to one.[26] In terms of the lost-day case rate, or doctors' cases, the magnitude of reductions attributed by different companies to their incentive schemes usually varies between 50 and 80% of the base rate. In other words, the rate of doctors' cases and lost days declines to one-half to one-fifth of what it had been before the incentive schemes came into effect.[27]

A very recent publication on incentive programmes that have been in effect for 11-12 years in two American mining companies, shows reductions to as little as one-ninth to one-fiftieth of the pre-incentive yearly numbers of days lost from work per million hours of work because of work-related injuries.[51]

2.3 Why Is It That Incentives Work?

There can be no question that incentives for safety are powerful means for reducing the accident rate, both per unit distance of mobility (per km driven), per unit of productivity (as in industry) and per person. In fact, the effectiveness of incentives appears to be much stronger than that of traffic accident countermeasures in the more traditional categories: education, enforcement and engineering. What could possibly explain this situation?

Any driver's manner of driving and his or her amount of mobility carries a degree of accident risk. The less prudent his/her manner of driving and the more he/she drives, the greater the risk of accident in a given time period, say, one year.

However, such behaviour also brings expected benefits: greater speed, less time loss, more thrill, less boredom, a greater distance of travel per year, more opportunity to visit far-away places, more commercially productive kilometres and so forth.

Drivers, therefore, accept some accident risk in return for these gains. As 'economic animals', they try to operate their vehicles at a level of accident risk such that they feel that the net benefit will be maximal (all gains and losses, including possible accident loss, being considered).

This is their preferred level of risk, and it depends on many factors: financial, cultural, gender, age, marital status, peer group pressure and personality traits, as well as transient states such as preoccupations, fatigue, blood-alcohol level and being in a rush. This list is far from complete, but the various factors influencing the preferred level of accident risk can be conveniently categorized into four general groups:

1. the expected advantages of risky behaviours;
2. the expected disadvantages of cautious behaviours;
3. the expected advantages of cautious behaviours; and
4. the expected disadvantages of risky behaviours.[28]

The preferred level of accident risk, and thus the accident rate, increases with increments in Factors 1 and 2, and decreases with increments in Factors 3 and 4. It follows that any intervention that leads to a decrease in Factors 1 and 2 should reduce the preferred level of risk and thus lead to accident reduction. The same holds for safety measures that enhance Factors 3 and 4.

This is precisely what incentives for not having an accident and disincentives for incurring one do. They stimulate the desire for safety in the driver population. Consequently, effective safety management largely depends upon a jurisdiction's ability to effectively control the preferred level of accident risk of its inhabitants.[29]

In contrast to safety promotion efforts through education, enforcement and engineering, economic interventions do not only appear to be more potent,[27] but their implementation is also relatively simple and cheap. Furthermore, it would seem much easier to stimulate people's motivation for safety through economic inducements than it is by attempts to directly influence the cultural and social values or personality traits that have a bearing upon the level of risk they prefer.

3. REQUIREMENTS FOR EFFECTIVE INCENTIVE PROGRAMMES

To serve the first objective of this report - to identify countermeasures that are effective - we have found evidence in Section 2 that incentive systems can achieve very significant gains in safety. However, past experience shows that some incentive programmes were more effective than others. The distinctive features of the more successful schemes will be specified in the present section. A checklist of desirable program charactertistics is thus developed. This will serve as a frame of reference, as a set of yardsticks, which is needed to effectively deal with the second issue posed in this paper: an evaluation of the comparative opportunities for implementing effective safety incentives under private and public management of automobile insurance (which will be discussed in Section 5).

What follows is a list of specific requirements for effective incentive programming.

3.1 The incentives should widen the utility gap drivers perceive between causing an accident and not causing an accident by as much as possible.[30] Thus, the safety programme can be expected to become more successful as the difference becomes greater between the advantage of not having an accident on the one hand and the disadvantage of having one.

3.2 The introduction and long-term maintenance of incentive programmes should be conducted with vigour, commitment and coherence.

3.3 The incentive system should be perceived as equitable by those to whom it is addressed. Does the driving public view the bonus as a just reward for not causing an accident in a given time period? In the case of disincentives, does the driving public view the penalty imposed (e.g., an insurance fee surcharge) as justified?

3.4 The incentive scheme should be developed in consultation with those (or with representatives of those) to whom it will be applied.

3.5 Programmes should be designed such that incentives are viewed by drivers as realistically attainable and thus not beyond reach.[24]

3.6 Incentive plans should be designed in a manner such that they strengthen peer pressure towards achieving the objective of no accident.[31] Thus, the plan should not only stimulate each driver's concern for his or her own accident-free record, but also motivate her or him to influence peers so that their accident likelihood is also reduced.

3.7 The time periods at the end of which incentives materialize into rewards and disincentives into penalties should be relatively short (say, one year at the longest).[32]

3.8 The amount of the incentive should grow as the individual driver accumulates a larger number of accident-free years. Incentive increments should follow a step-wise function that maximizes the driver's motivation to have no accident.[33-34]

3.9 The operational rules of an incentive system should be kept simple so that they can be be communicated clearly to all persons to whom the programme applies.[35]

3.10 Other things being equal, preference should be given to that incentive programme that is the easiest – the least costly – to administer.

3.11 Thought should be given to the question of how to counteract any problems that may arise from drivers underreporting the accidents they have. This is important for a number of reasons. First, accident statistics may be in serious error as it has been estimated that a large proportion of all reportable crashes may in fact be unknown to the police and thus are not accounted for in the official accident statistics. Estimates of all property damage accidents accounted for in official records vary between 25 and 86%. Corresponding estimates for personal injury accidents depend on the type (pedestrian, cyclist, driver) and age of injured road user[36] and vary between 25 and 93%. Secondly, erroneous impressions of countermeasure effectiveness may result if there are changes in police investigation practices, or if the driving public alters - as a consequence of some intervention - its inclination to report accidents to the authorities or private insurance companies. A more detailed discussion of this issue and references are presented elsewhere.[33]

3.12 Like any other accident countermeasure, an incentive plan should not be introduced without prior research into its short-term and long-term feasibility, nor without prior research into its best possible form, nor finally without provision for scientifically adequate evaluation of its costs and of its effectiveness in reducing the accident rate.

4. POTENTIAL SOURCES OF INCENTIVE PROGRAMMES IN THE PUBLIC SECTOR

In this section we will discuss various possible sources of incentives for safe driving in the general population which may be instituted through government action. Some of these have already been mentioned in previous sections, while other potential sources are added in a more speculative vein. In accordance with the Commissioner's requisition regarding the contents of the present report,[37] these possible sources are presented, first, under the assumption of privately run automobile insurance and, second, under the condition of public insurance management.

4.1 When Automobile Insurance Is In Private Hands

Following the California example,[13] the province may offer free driver's licence extension by one year for each year drivers are accident-free.[38,39] In addition, and as a disincentive, the validity of a driver's licence may be shortened by one year as a penalty of each year in which the driver had one or more culpable accidents. Another way of using driver's licence renewal as a source of incentives/disincentives could consist of discounts and surcharges in the renewal fee.

Following the Connecticut example,[11] the province may abolish the funds that are used by Boards of Education for the provision of driver education in high schools. This, naturally, would be a one-time intervention, rather than an ongoing one.

Another opportunity for incentives is offered by reducing the charge for the annual validation stickers of vehicle permits. Thus, this incentive would be based on the 'culpable' accident experience of the vehicle (i.e., regardless of the identity of the driver(s) of the vehicle, but depending upon whether the driver was at fault) and be extended to the owner. Surcharges in annual permit fees may be used as an analogous disincentive.

Discounts and surcharges in the provincial portion of income tax paid by holders of driver's licences may be considered and justified on the grounds that the province's expenditures for medical treatment of people injured in accidents are carried by Ontario Health Insurance Plan (OHIP) and the cost of the health delivery systems greatly exceeds the sum total of OHIP fees.[41]

Reasoning in the same vein, a discount and/or surcharge in the OHIP fee payable may be considered for holders of a driver's licence as a function of their culpable accident experience.

Finally, the provincial government may attempt to exert pressure on the private automobile insurance companies towards installing incentive and disincentive schemes of their own.

Some of these bonus and penalty systems would obviously be more cumbersome to implement and administer than others. Part of the administrative difficulties arises from the need for verification of driver and vehicle record accuracy and recency.[40]

We will refrain from elaborating on the more precise procedural details of the above suggestions, and this for two reasons. First, each of these suggestions is in need of in-depth feasibility study in collaboration with officials in administrative domains in which the present author has no claim to expertise. Secondly, although there is reason to believe that the potential accident reducing effect of the above suggestions is sizeable enough to warrant serious consideration, this effect is likely to be relatively modest in comparison with what may be achieved in terms of accident prevention if automobile insurance is placed under public control (as will be seen in Section 5).

4.2 When Automobile Insurance Is Under Governmental Responsibility

If this condition prevails, all of the above-mentioned possibilities would, of course, still apply. They would, however, be joined by direct public control over a relatively simple to manage and most powerful source for effective safety programming. Why this is so will be discussed in the next section.

5. A COMPARISON OF OPPORTUNITIES FOR EFFECTIVE SAFETY PROMOTION UNDER PRIVATE VERSUS PUBLIC DELIVERY OF AUTOMOBILE INSURANCE

In Section 2 we arrived at the conclusion that those measures that take the form of enhancing drivers' desire for safety are the most promising interventions for the purpose of accident reduction. The best available method for stimulating this desire appears to be the extension of incentives for the successful avoidance of 'culpable' accidents and the imposition of penalties for incurring such accidents. Specific features that strengthen the effectiveness of this type of intervention have been outlined in Section 3. Subsequently, in Section 4, potential sources for incentive programmes have been pointed out under conditions of public versus private delivery of automobile insurance.

The task we seek to accomplish in the present section is to compare the opportunities for road safety promotion in Ontario under these two conditions. In doing so, the same sequence of criteria as presented in Section 3 will be followed. A quick overview of our observations is provided in Table 1.

5.1 Widening of the Utility Gap

As noted in Section 2.3, the traffic accident rate may be expected to drop to the degree that the driving population's desire for safety is enhanced. This desire will be greater to the extent that the difference between the advantage of not having an accident on the one hand, and the disadvantage of having an accident on the other, is widened.

TABLE 1: Comparative strengths of private and public insurance in terms of requirements for effective incentive programming.1)

	REQUIREMENT	INSURANCE: PRIVATE	INSURANCE: PUBLIC
1.	Widening of the utility gap	-	+
2.	Managerial vigour and commitment	-	+
3.	Perceived equity of incentives	-	+
4.	Consultation with the driving public	-	+
5.	Perceived attainability of bonuses	=	=
6.	Enhancement of peer pressure towards safety	-	+
7.	Short incubation periods for incentives	=	=
8.	Continued accumulation of safety credits	=	=
9.	Simplicity of rules and fee structure	+	-
10.	Low cost of administration	-	+
11.	Handling the underreporting problem	-	+
12.	Research and development effort	-	+

1) - means weaker; + means stronger; = means no difference

In Section 4, various possible sources for incentives have been mentioned. Although in the absence of government-run automobile insurance, several such possibilities exist, their scope in terms of the size of the utility gap is much smaller than is true for automobile insurance. This is simply due to the fact that automobile insurance fees are much larger than the annual cost of a driver's licence or a vehicle permit, and thus offer much more room for differential (dis)incentives extended to accident-free as compared to accident-involved drivers.

Consequently, insurance fee discounts and surcharges are the best available source for incentives and disincentives.

5.2 Managerial Vigour and Commitment

It has been emphasized repeatedly in the available literature that the effectiveness of incentive programmes aimed at accident reduction depends on the degree of managerial commitment to this cause.[19-25] Thus, drivers should not only be informed of the incentive programme in existence, but they should also frequently be reminded of it in novel and attention-catching ways. It is obvious as well that the effort of any agency – be it private or public – towards accident prevention depends on its commitment to the goal of per capita accident reduction. The likely prospect for managerial vigour towards accident reduction in private insurance industry and in government will be discussed in the two Subsections 5.2.1 and 5.2.2 below.

5.2.1 Commitment to Safety Promotion In Private Automobile Insurance Industry

Private insurance is naturally not in the business of accident prevention, but in enhancing the difference between the total amount of fees received on one hand and expenditures due to claim costs, claim adjustment costs and administration on the other. The larger this difference is, the greater the opportunity for making a profit.

A sudden drop in the accident rate (for instance, as the result of incentive programmes) would of course be welcome to the private insurance industry: relative to the fees already received, the cost of claims and claim adjustment would show a marked drop, and absolute profit would be greater.

It should be noted, however, that this welcome will by necessity be short-lived. This is because the amount of money people are willing to pay out in insurance depends upon the amount of risk they perceive. This, in turn, ultimately depends upon the risk there actually is.[42]

While, as individual persons or as corporate citizens, people in the private insurance industry may have a genuine interest in promoting safety, one cannot expect a business to act against its direct commercial interests.

5.2.2 Commitment to Road Safety Promotion In Government Agencies

However, it is no less relevant to note that the absence of a strong concern for reducing the accident rate may also be reflected by many of the countermeasures taken by those governments that have no direct financial or political stake in actual accident reduction. This is because politicians may be tempted, for public relations reasons, to take measures whose main or exclusive merit consists in showing the electorate that something is being done about the safety problem.[43] Surely, democracy demands that safety is seen to be promoted, but whether it actually _is_ promoted is another matter.

When recent history of road safety management in various countries or smaller jurisdictions is compared with other government concerns such as health care, it will unfortunately be seen that many governments have failed to develop coherent and vigorous strategies for traffic accident prevention. In part, this may well be due to the fact that responsibility for safety is usually divided across various ministries (such as for health, education, justice, transportation and internal affairs), while the very division of responsibility may reflect lack of governmental concern for the issue.

At any rate, this responsibility, like the 'proverbial buck', is often passed from one party to another and no concerted action emerges. For the sake of briefness, let one documented instance suffice to illustrate the point. An inter-ministerial road safety committee encompassing seven ministeries in the Netherlands (with a population exceeding half of Canada's), each ministry having a share in the responsibility for road safety, took no less than four years after its establishment by parliamentary decision to confer around the same table and to discuss and integrate the respective policies.[44]

In this context it should be noted too that the general public's pressure towards greater safety is also generally wanting. Apart from occasional outcries vociferated by some citizens' groups in some jurisdictions against the ubiquitous presence of the automobile, against the safety threat posed by heavy trucks or by young or drunk drivers, there seems to be no strong and persistent demand for greater safety throughout the general population.

In fact, if it existed, people would not wait for government action, but simply resort to their own capabilities to reduce the accident rate by voluntarily changing their amount and manner of road use. In other words, people in any jurisdiction have the accident rate they are collectively willing to accept in return for the amount and manner of mobility they enjoy. Unless the desire for safety is somehow stimulated, people will exert only little pressure on their government to reduce the accident rate, and, in turn, the government is not likely to develop the political will that is necessary to take more substantial, than merely symbolic, measures towards accident reduction. It would seem fair to conclude that there is little ongoing governmental, corporate or public interest in reducing the traffic accident rate.

So, in order to break this 'vicious circle' - vicious from the safety promotion point of view - between people's complacency and lack of political will on the part of their elected representatives to reduce the accident rate, what can a government do?

Suppose we are dealing with a government that is fully aware of the tremendous costs (see Section 1) of traffic accidents to its jurisdiction. Suppose too that we are dealing with a government that wishes to play a leadership role in reducing the traffic accident rate, rather than remaining a mere follower of existing public attitudes and conduct. Suppose finally that this government would like to be a shining light, an exemplar, to governments of other jurisdictions, and to project its influence into the future (as earlier governments have achieved by many forms of social legislation).

In that case, the answer to what a government could do in order to reduce the traffic accident rate is very simple indeed: (a) assume public responsibility for automobile insurance, and (b) impose insurance fees according to each individual driver's past accident record. In doing so, a government would be able to achieve two things: it would "pull itself up by its own bootstraps" in becoming more concerned about safety promotion than before, and it would enhance the general public's desire for safety and thus strengthen public support for the governmental effort.

In addition, there is reason for expecting that the government's commitment to road safety promotion will increase with time if it were to assume responsibility for accident insurance. When claim costs rise from year to year as a consequence of continued inflation, there would seem to be three options for a government to cope with this: (a) impose higher insurance fees upon the electorate, (b) absorb the increased costs through other (tax) revenues, or (c) attempt to reduce the accident rate. As the first two alternatives are unlikely to be attractive to a government that wishes to stay in power, it will likely become more inclined to develop a stronger thrust in the pursuit of accident reduction.

To sum up so far what has been pointed out in this section: among the various possibilities, insurance premiums appear to be the most productive source for effective incentive programmes for safety, and the institution of government-run insurance for automobile accidents holds the promise of a much more determined management of traffic safety than can be expected under private insurance conditions.

The likelihood of fulfilment of the other conditions for effective incentive programming does of course depend on managerial commitment and the two conditions already dealt with would seem to have an overwhelming impact as compared with the others. Consequently, we can be brief in describing the comparative opportunities for the design of incentive schemes under private and public insurance conditions against the remaining criteria.

5.3 Perceived Equity of Incentives

Here again we see a point in favour of government-run insurance, because the democratic process, in the case of public dissatisfaction, provides for swifter and more effective influence upon members of government and/or parliament than on the practices of private businesses.

5.4 Consultation With the Driving Public

Once again, this criterion for effective safety programmes of the incentive/disincentive variety would seem to be best met if automobile insurance were to be placed under public control. This is because politicians and the civil service are more likely to pay attention to the will of the electorate.

5.5 Perceived Attainability of Bonuses

This of course depends on the precise ramifications of any incentive scheme, and in principle there would seem to be no reason to assume that private schemes would satisfy this criterion any more or less than public ones.

5.6 Enhancement of Peer Pressure Towards Safe Conduct

The effect of peer pressure or social pressure towards any individual's cautious behaviour on the roads depends among other things upon the number of peers or other people exerting the pressure.[31] Maximum peer pressure would be more likely to occur under conditions of public automobile insurance, because the same rules would apply to each individual driver. In the case of private insurance, it could maximize too on condition that all private insurance companies operating in Ontario acted in concert.[46] However, as there are as many as 79 such companies, the likelihood of a fully concerted policy system is not all that great. Moreover, the more the private insurance companies would act in similar fashion, the more the competitive edge between individual companies would be progressively eliminated, and thus ultimately the very *raison d'étre* of private insurance would disappear.

5.7 Short Incubation Periods For Incentives to Materialize

The general principle that applies here is: the shorter the incubation period, the greater the to-be-expected reduction in the accident rate. However, short incubation periods demand that drivers be frequently informed of the subsequent discount/surcharge status. This engenders administrative costs due to verification of record accuracy and recency, as well as the preparation and mailing of letters. Periods shorter than six months or even one year may, therefore, not be realistically attainable.

To provide for immediate feedback to drivers who are at fault in an accident, it is necessary that they be informed of the surcharge implications for their next insurance period as soon as is administratively possible after the occurrence of the accident.

Apart from the issue of managerial commitment discussed in Section 5.2, we see no reason for assuming that private and public insurance would differ in their ability to meet this requirement.

5.8 Opportunity For Continued Accumulation of Safety Credits

According to a 1982 paper on incentive schemes for accident-free driving, it would seem that the manner in which premiums are reduced for consecutive years of accident-free driving is not optimal from the point of view of effective behaviour shaping. In Ontario, for instance, the discounts in insurance fees do not become progressively greater with the continued accumulation of an accident-free record spanning more and more years. Absolute fee reductions actually diminish with the progression of time.[33] This is in conflict with the theories of human motivation that state that reward increments are necessary for maintaining effort towards performance goals of increasing difficulty.[47,48] Moreover, in a jurisdiction such as Ontario, additional discounts are not extended beyond five years of accident-free driving. If a driver is at fault after this period has lapsed, a 'forgiveness clause' is in effect, which may save the driver from an increase in his/her insurance fee if he or she has an accident.[49] Approximately 49% of licensed drivers have no accident in a 5-year period. The implication is that the potential for behaviour shaping through insurance fees is not being used in about one-half of the entire driver population and is poorly used in the other half.[34]

This situation can, of course, be remedied.[33] Again, with the caveat regarding managerial commitment, we see no reason why private and public insurance would differ in their capability to bring this remedy about.

5.9 Simplicity of Rules and of Fee Structure

Here we meet with a requirement for effective incentive programming where private industry may possibly do better than government. This is because government regulations – reflecting the complexity of society, legal technicalities and various demands for equity – have a tendency to become progressively encumbered by so many clauses, exceptions and special considerations, that the regulations often reach a level of complexity that is well beyond the rapid understanding of the average citizen (including the present author when attempting to complete the income tax forms).

5.10 Ease and Low Cost of Administration

The province already has various administrative systems regarding driver's licence holders in place: driver licensing, vehicle registration, the demerit point system and the OHIP and related health delivery files.

Delegating the bookkeeping for automobile insurance and an incentive system to public authority would likely be much less costly than the sum total of administration costs carried by as many as 79 different companies presently in the business of private automobile insurance in Ontario.[46]

Consequently, less of the total insurance cash flow would have to be spent on clerical effort and correspondingly, more would be available for effective safety programming.

5.11 Handling the Under-Reporting Problem

In order to make accident statistics reliable, it is not sufficient to rely on police or insurance records; hospital records have to be included in the data gathering process as well. The fact that these records already exist, and that they are part of government documentation in the form of OHIP health care delivery, is a point in favour of integrated government control over road safety management.

5.12 Meeting the Needs for Research and Development

In Section 2 it was shown that programmes, which provide incentives for accident-free driving and disincentives toward incurring an accident in which the driver is judged to be at fault, are capable of producing substantial reductions in the accident rate.

Nevertheless, with respect to the practical introduction of any such programme in a particular jurisdiction, several practical questions remain.[50] To name just a few: what are the comparative merits of allowing an accident-free driver to pay a reduced fee versus sending him or her a rebate at the end of the insurance period? What incentives and disincentives are viewed as equitable by the driving public? What extended bonuses are viewed as realistically attainable and what penalties are, indeed, possible to avoid? What incentive scheme is most likely to enhance peer pressure towards safe conduct in traffic? What is the optimal fee structure from the point of view of maximizing driver safety motivation in the short and long term, while actuarial considerations of accident probabilities are taken into account? What format of operational rules for incentives/disincentives is simple enough to be readily understood by those to whom it is addressed? How do drivers in fact alter their behaviour in response to an incentive system coming into effect? What are the implications for mobility and transport economics? Is the danger of under-reporting of minor accidents indeed the only discernable negative side-effect of incentive programmes?

It is obvious that the careful introduction and the evaluation of the effectiveness of incentive programmes requires the support of a considerable research and development effort. Thus, the question arises, under what conditions of automobile insurance, private or public, do we have reason to believe that this research will indeed be carried out?

When past performance is taken as a basis for predicting future performance, there is little reason for confidence that the research will indeed be undertaken if automobile insurance remained in private hands.[42] The considerations discussed in Sections 5.2.1 and 5.2.2 make it rather unlikely that in such circumstances the research will be conducted either by the private insurance industry, or indeed even by government. However, the viability of this research would be greatly enhanced if automobile insurance were to be placed under government responsibility, because the research would then be viewed as necessary towards the goal of maximally efficient accident reduction, a goal in which the government would then have a vital interest. As noted earlier in this report, the private automobile insurance industry cannot be expected to be interested in pursuing the goal of accident reduction with vigour and persistence.

6. CONCLUSIONS

In agreement with our mandate,[37] the focus of this report has been on traffic accident reduction. It has been discussed, first, what kind of accident countermeasures promise the greatest benefit for safety. These turn out to be those countermeasures that are successful in stimulating the driving public's desire for safety, and incentives for accident-free driving were found to be the most helpful toward this purpose.

Next, the required features of a maximally effective incentive plan have been identified and, using these as a frame of reference, we have attempted to evaluate the comparative opportunities for successful incentive programming under conditions of private and public automobile insurance. The results of this review are summarized in Table 1.

With respect to most criteria, the opportunities for effective safety programming would seem to be greater under public than private control over automobile insurance. These include the two criteria that carry the heaviest weight in this comparison: (a) widening 'the utility gap' between a driver's benefit resulting from not having an accident and the disadvantage of having one, and (b) the strength of managerial commitment to safety promotion.

The other prerequisites which seem to have a better chance of being fulfilled when automobile insurance is managed by the public sector are: (c) the equity of the incentive system according to public opinion, (d) the necessary consultation between insurers and insurees on the particular operational rules of the incentive programme, (e) the enhancement of peer pressure towards safe conduct, (f) low cost of administration, (g) adequate handling of the accident under-reporting problem, and (h) discharging the responsibility for an appropriate research, development and programme-evaluation effort.

With respect to three yardstick for effective programming, we found no major differences in the prospective adequacy between private and public insurance. These are the needs to ensure (i) that the bonuses for safety are indeed being perceived as attainable, (j) that their incubation periods are relatively short, and (k) that drivers' entitlement to progressively greater insurance discounts in return for accident-free driving continues to grow over the span of many years.

It has been pointed out, however, that the equality of private and public insurance in meeting these particular requirements largely depends on the managerial effort of the private insurance industry towards the design, implementation and continued maintenance of effective incentive programmes. It has been pointed out, too, that a firm commitment of this industry to such an effort may be called into question, because safety promotion is not in the interest of private insurance and no business can be expected to act against its direct commercial concerns.

Finally, against one of the twelve identified yardsticks of successful incentive programming, privately-run insurance may be more satisfactory than may be expected to be true for insurance managed by the public sector, especially in the long run. This regards the requirement that the rules of any discount/surcharge system should be sufficiently simple to allow comprehensive as well as comprehensible communication to the driving public.

It would seem clear then that the documented evidence, the inferences following from it, and various other specified considerations must lead to the conclusion that the traffic safety interests of the jurisdiction of Ontario are likely to be better served if automobile insurance were to be placed under public control.

We have seen that it can make a great deal of difference to road safety, depending on whether automobile insurance is run in the private or in the public sector. So, what options for government action regarding the present issue of who should be in control of automobile insurance are open?

The first possibility is to "leave things as they are", but to do this implies that road safety authorities would miss out on a rare and major opportunity for reducing the road accident problem, as I hope to have convincingly demonstrated in this report.

The second possible course of action for government is to place automobile insurance under public sector management. In that case, the above-mentioned opportunity will not be missed, but will it be exploited to its full potential? As has been pointed out in this report, government-run insurance, although in most, is not superior in *all* respects relative to effective safety programming. Government insurance - because of the financial interest it implies - may be viewed as a *necessary* condition for vigorous and coherent management of the road safety problem, but is it also a *sufficient* condition?

A third possibility for government action is to leave automobile insurance to private business, while imposing either general guidelines or strict regulation on the industry with regard to scientifically sensible discounts and surcharges as a function of a driver's accident record. This option may be welcomed as a compromise, but it may by the same token compromise the purpose of safety promotion, because private business cannot be expected to wholeheartedly comply with regulations that run counter to its commercial interests.

It should be obvious from the evidence and considerations presented in this paper that the issue of road safety in Ontario (among other deliberations not discussed here) does indeed deserve a prominent position in the process of arriving at a judicious choice between private and public insurance.

NOTES AND REFERENCES

1. This was calculated from the following information. The total amount of property damage in Ontario in 1985 has been estimated at CDN$ 547,518,951 (Ontario Road Safety Annual Report, 1985, p. 8). In that year there were 1,191 persons killed in traffic and 109,169 injured and the estimated population was 9,066,000. The average cost of a fatality is estimated at CDN$ 260,000 and the average cost of an injury CDN$ 3,000. These costs are expressed in 1985 dollars and are based on information provided by J.J. Lawson, Chief, Evaluation & Data Systems, Road Safety Directorate, Transport Canada, Ottawa.

2. That the estimate of CDN$ 131 per head of population may well be an underestimate is suggested by a report under the title "The Economic Cost to Society of Motor Vehicle Accidents" (U.S. Department of Transportation, National Highway Safety Administration, Report no. DOT HS 806 342, January 1983). This report considers costs due to property damage, lost productivity, medical treatment, insurance administration, legal and court operations, emergency services, coroner/medical examination and the administration of public assistance programmes. For the year 1980, the economic loss to society from motor vehicle accidents was estimated to have been US$ 57.2 billion. If this is divided by 220 million (the population estimate in that year), one arrives at an estimate of US$ 260 per head of population. In any effort to 'translate' this estimate to Ontario in 1985, one should consider the exchange rate, the rate of inflation as well as the fact that this U.S. estimate did not account for traffic delay costs due to accidents (op. cit., p. B-21).

3. Statistics Canada. Causes of death, Vital statistics, Vol. IV, 1985.

4. A person who dies in an accident at the age of 20 loses 40 more potential years of life than somebody who is accidentally killed at the age of 60.

5. Hauser, D.J. "Seat belts: is freedom of choice worth 800 deaths a year?" Canadian Medical Association Journal 110 (1974): 1418-1426.

6. See Wells, R. "The lost years on the road." Medical Journal of Australia (January 1972): 186-188.

7. This accident rate should be clearly distinguished from the accident rate using other denominators: per 100 million kilometres driven, per hour of road use, per total number of registered vehicles, per km of public road in the jurisdiction or whatever other denominator. This is because, depending upon the choice of denominator, different rates show radically different patterns. To illustrate the point: in Ontario the rate of fatal accidents per 100 million miles driven dropped from about 8.5 in 1955 (the first year for which these data are available) to about 4.5 in 1972 (the year before the oil embargo and the ensuing 'energy crisis'), while the fatal traffic accident rate per 100,000 inhabitants rose from about 20.5 to about 23 in the same period. Similarly in the U.S., the fatality rate per 100 million vehicle miles dropped from about 11.3 in 1943 to about 4.5 in 1972, while the rate of fatal accidents in traffic rose from about 20 per 100,000 population to about 27. In view of the marked from-year-to-year variability in the traffic death rates per capita, the above statistics regarding the annual traffic death rates per capita were calculated on the basis of the regression equation relating the traffic death rate to the sequence of calendar years. In contrast, the traffic death rate per 100 million miles driven shows a much smoother curve (see Wilde, G.J.S. "On the choice of denominator for the calculation of accident rates." in Risk in Transport /ed. by S. Yagar. – Waterloo, Ont.: Univ. of Waterloo Press, 1984, pp. 139-154).

Readers of this report may well be puzzled by the factual observation that a reduction in the accident rate per km driven over several decades has not been associated by a commensurate reduction in the road-user accident rate per capita. One possible explanation for this, however, is quite simple. Accident countermeasures that are effective in reducing the accident rate per km driven are generally those that allow drivers to move faster at the same accident risk per hour of exposure. As the introduction of a more crashworthy car or a more forgiving road does not influence the preferred level of risk (see Section 2.3) per se, drivers respond by driving faster and more kilometres. So, the exposure to accident risk per head of population is not diminished by such countermeasures, but it can be reduced by interventions that decrease the preferred level of risk in the population.

8. Other programmes, which take the form of extending a bonus for particular safe behaviours, such as wearing a seat belt, have generally produced substantial increases in the frequency of such behaviours, as may be concluded from the literature references listed below.

(a) Cope, J.G., Smith, G.A. and Grossnickle, W.F. "The effect of variable-rate cash incentives on safety belt use." Journal of Safety Research 17 (1986): 95-99.

(b) Geller, E.S. Motivating safety belt use with incentives: A critical review of the past and a look to the future. – Warrendale, Pennsylvania: Society for Automotive Engineers, 1984. – (SAE technical paper series; no. 840326).

(c) Geller, E.S., Davis, L., and Spicer, K. "Industry based incentives for promoting seat belt usage: Differential impact on white collar vs. blue collar employees." Journal of Organizational Behavior Management 5, (1983): 17-29.

(d) Geller, E.S., and Hahn, H.A. "Promoting safety belt use at industrial sites: An effective program for blue collar employees." Journal of Professional Psychology: Research and Practice 15 (1984): 553-564.

(e) Horne, T.D., and Terry, T. Seat belt sweepstakes — An incentive program. – Warrendale, Pennsylvania: Society of Automotive Engineers, 1983. – (SAE Technical paper series; no. 830474).

(f) Rudd, J.R., and Geller, E.S. "A university-based incentive program to increase safety belt use: Toward cost-effective institutionalization." Journal of Applied Behavior Analysis 18 (1985): 215-226.

(g) Spoonhour, K.A. "Company snap-it-up campaign achieves 90 percent belt use." Traffic Safety 81 (1981): 18-19, 31-32.

(h) Geller, E.S. et al. A Commitment/Incentive Program to Increase Safety Belt Use on a University Campus. – Washington, D.C.: U.S. Dept. of Transportation, National Highway Traffic Safety Administration, March 1987. – (Report no. DOT HS 807 110).

(i) Geller, E.S. et al. Long-Term Effects of Employer-Based Programs to Motivate Safety Belt Use. - Washington, D.C.: U.S. Dept. of Transportation, National Highway Traffic Safety Administration, Feb. 1987. - (Report no., DOT HS 807 111).

9. Although 'incentive' and 'disincentive' may be viewed as each other's mirror image, we do not wish to imply that they are equivalent in their accident-reducing effect. On the contrary, there is evidence in numerous sources to indicate that 'positive reinforcement' for desirable acts generally has a stronger and longer lasting modifying effect upon behaviour and is true for 'negative reinforcement' of undesirable acts. (See Note 33 for a review). In plain English: honey catches more flies than vinegar, and the carrot is more powerful than the stick.

10. Barmack, J.E., and Payne, P.E. "The Lackland accident countermeasure experiment." Highway Research Board Proceedings 40 (1961): 513-522.

11. Robertson, L.S. "Crash involvement of teenaged drivers when driver education is eliminated from high school." American Journal of Public Health 70 (1980): 599-603.

12. This means that for each 16- and 17-year-old resident, the amount of time was determined in which he/she was in the possession of a driver's licence during his/her 16th and 17th year. The sum total of this time aggregated across all 16- and 17-year-olds gives the 'licensed years'.

13. Harano, R., and Hubert, D.E. An evaluation of California's 'Good Driver' incentive program. Sacramento: California Dept. of Motor Vehicles, 1974. - (Report no. 6)

14. I.e., 25 years of age or less. This may be due to younger people - because of their lesser income - placing a higher value on the bonus and/or younger people being "less set in their ways" and thus having less difficulty in altering their driving habits.

15. This agrees with the general finding that under the prevailing contingency ("fixed interval reinforcement schedule"), response patterns are often weak and uneven in the early parts of the interval, but become vigorous towards the end (see Luthans, F., and Kreitner, R. Organizational Behavior Modification. - Glenview, Ill.: Scott, Foresman, 1974).The practical implication is that, in order to enhance performance, intervals should be short.

16. It should be noted that a parallel experiment, using unexpected and unconditional rewards instead of incentives (which by definition are announced in advance and conditional) led to increases in the accident rate of the drivers who received these unexpected rewards. The marked difference in results highlights the important distinction between 'reward' and 'incentive' programmes and shows that the latter should be prepared with great care.

17. Tschernitschek, E. "Verkehrssicherheitsprogramm eines Vertriebsunternehmens." Berufsgenossenschaft. (February 1978). Additional reports on this "Kraft-Fahr-Sicherheitsprogramm 1957-1982" were received from Dr. J. Labudde, Eschborn, West Germany, via Prof. Praxenthaler (Cologne) and Dr. K. Reiter (Essen).

18. Unfortunately, we are not dealing with a well-controlled experiment. The safety programme contained educational components in addition to the incentive. No control data from other companies without an incentive system are provided. However, the sheer size and the temporal pattern of the observed accident reduction leads one to believe that the incentives must have been the dominant effective factor.

19. Cohen, A., Smith, M.J., and Anger, W.K. "Self-protective measures against workplace hazards." Journal of Safety Research 11 (1979): 121-131.

20. Crapnell, S.G. "For prize-winning programs, try awards and incentives." Occupational Hazards 44 (1981): 35-40.

21. Czernek, A., and Clack, G. "Incentives for safety: how prizes for avoiding accidents foster safety awareness." Job Safety and Health 1 (1973): 7-11.

22. Lancianese, F.W. "Small plant's safety success formula." *Occupational Hazards* 43 (1981): 45-48.

23. Palisano, P. "Awards and incentives heighten workers' safety awareness." *Occupational Hazards* 43 (1981): 35-40.

24. Bartels, K. *Uber die Wirksamkeit von Arbeitssicherheits-pramien*. - Dortmund, W. Germany, 1976. This is unquestionably one of the best available documents on the use and effect of incentive for safety in occupational settings.

25. Karasina, N.I. *Psychological and material incentives for the improvement of workplace conditions*. - Moscow: Scientific Research Institute for Occupational Safety, 1977. (In Russian). The open-minded reader of this monograph will notice that, despite the 'heavy-duty' (duty indeed!) ideological comments by the author, occupational safety problems and their effective treatment by means of incentives are not unique to jurisdictions characterized by free enterprise.

26. This means that a company can make money on its safety incentive programme! The cost of investment in safety improvement (i.e., payment of the bonuses) is in fact more than offset by reductions in the cost of insurance fees. This means that insurance organizations experience a cut in fee revenue. In other words, the added safety is achieved at the expense of fee income received by the insurance organizations. See Section 5.2.1.

27. The interested reader may well be surprised that the relatively modest bonuses for safe conduct on the road as well as in industry are apparently capable of producing major reductions in the accident rate. This is possibly due to the intrinsically interesting challenge posed by incentive schemes ("Can I achieve the safety criterion or not?"), plus the *social recognition* that comes with attaining the objective. Human conduct is replete with examples showing that behaviours that lead to or reflect economic success rapidly become the norm as to what is the proper thing to do. At any rate, the observation that minor benefits to safe conduct reduce the accident rate to a major extent is in general agreement with an observation made by Starr (Starr, C. "Social benefit versus technological risk. What is our society willing to pay for

safety?", Science, 165 (1969): 1232-1238). That author found evidence that in an unsafe activity (i.e., various kinds of mining) the accident rate (injuries per man-hour) was exponentially related to hourly wages: accidents rose with the third power of the financial benefit. Thus, augmenting the benefit accruing from safe behaviour by a small amount should reduce the accident rate by a comparatively large amount.

28. In passing, it may be noticed that the subjectively perceived cost of an accident may be different under 'fault' versus 'no-fault' insurance. If no-fault insurance is interpreted by drivers as 'no blame' or in any other way reduces the expected seriousness of accident consequences, then an increase in the accident rate must be anticipated from a change-over from 'fault' to 'no-fault' insurance. This view is apparently not shared by O'Connell who wrote: "Nor need we fear that an increase in victims' faulty conduct will result from paying faulty and faultless accident victims alike." (In O'Connell, J. "Tort versus no-fault: Compensation and injury prevention." Accident Analysis and Prevention 19 (1987): p. 70). However, close reading of this paper reveals that O'Connell himself is not positively confident of that statement and that he favours no-fault insurance primarily for reasons other than safety considerations. Moreover, O'Connell's statement appears to be contradicted by the increase in accidents that followed the introduction of no-fault insurance for corporal damages (injuries and fatalities) in the Province of Quebec in March 1978, but it should be noted that the new law encompassed other elements as well. At any rate, it has been calculated that accidents with property damage only increased by 11%, those with personal injury by 26.3% and fatalities by 6.8%. It is of interest too that the author noted that while the "centralized compensation system [.....] generally increased greatly the speed, frequency, and size of compensations", it also probably led to a condition "that would lower the incentive to drive safely", and that "lowered the average quality and motivation to safety of the stock of drivers because of the sudden subsidy given to relatively risky drivers and the suppression of the notion of fault for all drivers". (See Gaudry, M. Measuring the Effects of the 1978 Quebec Automobile Insurance Act with the DRAG model. - Quebec: Centre de Recherche sur les Transports, Université de Montréal, 1986, p. 9).

29. Theoretical and empirical reasons for this statement are explained more fully in the following publications by the present author:

(a) "Social interaction patterns in driver behavior: An introductory review." Human Factors 18 (1976): 477-492.

(b) "The theory of risk homeostasis: Implications for safety and health." Risk Analysis 2 (1982): 209-225.

(c) "Critical issues in risk homeostasis theory: A reply." Risk Analysis 2 (1982): 249-258.

(d) "Beyond the concept of risk homeostasis: Suggestions for research and application towards the prevention of accidents and lifestyle-related diseases." Accident Analysis and Prevention 18 (1986): 377-401.

(e) "Risk homeostasis theory and traffic accidents: Propositions, deductions and discussion of recent commentaries." Ergonomics (1987) (in press).

30. The terms 'causing an accident' and 'not causing an accident' are meant here to be equivalent to being held legally responsible (wholly or in part) for an accident. In principle, incentive and disincentive programmes should also be capable of reducing the rate of non-culpable accidents, because by adopting a 'defensive' driving style drivers have the ability to reduce the likelihood of accidents in which they would not be at fault. For instance, it has been observed that drivers who have been drinking are not only more likely to get involved in culpable accidents than sober drivers, but they also incur more accidents in which they are not at fault [see e.g., Perrine, M.W., Waller, J.A., and Harris, L.S. Alcohol and Highway Safety: Behavioural and Medical Aspects. - Springfield, Virginia: National Technical Information Service, 1971. - (National Highway Traffic Safety Administration, Technical report no., DOT-HS-800-599)].

Although drivers can reduce the likelihood of getting involved in accidents in which they would not be deemed to be at fault, it would problably run counter to public concepts of equity if these drivers were to receive a penalty for such accidents. The same holds for withholding the reward for safe driving from those drivers who did have an accident, but in which they were not deemed to be at fault. It is, therefore, reasonable to assume that bonuses and penalties will apply according to the table below.

	Accident: at fault	Accident: not at fault	No Accident
Reward applies	(a) no	(b) yes	(c) yes
Penalty applies	(d) yes	(e) no	(f) no

31. An effort to incorporate a programme component aimed at strong enhancement of peer pressure toward traffic safety, especially among young drivers, was made some time ago in an experimental incentive programme designed to be carried out in Saskatchewan (but that has not been implemented as yet). All holders of a driver's licence in separate age groups (e.g., the 16- and 17-year-olds, the 18- and 19-year-olds) residing in selected communities in the province would be informed that the Saskatchewan government insurance expects to pay out, for instance, $3 million in claims to individuals in the given age group in that community in the course of the subsequent year. To this information it would be added that "any cent you can save will be divided among those of you who have no accidents in which you are responsible."

Thus, we are dealing here with a program in which the accident-free individual receives the bonus, but it may be anticipated that peer pressure towards safety will be accentuated. This is because the size of the bonus would not only depend upon one's own performance, but also upon the performance of one's age group as a whole. So, individual drivers would be made more interested not only in his or her own safety, but also be more concerned that their peers have no accident. This amounts to adding a material incentive to the cultural behest that people "behave as their brother's or sister's keeper."

Note that this programme is essentially free of financial risk to the insurer (i.e., Saskatchewan Government Insurance and Highway Traffic Board. A Strategic plan for research into young driver loss reductions. - Regina, February 1982), because no money would be paid out in bonuses in addition to what would be saved through fewer claims. (Saskatchewan Government Insurance and Highway Traffic Board. A strategic plan for research into young driver loss reductions. Regina, February 1982).

32. It would seem that delayed rewards/penalties are discounted, and thus less effective in shaping behaviour than more immediate consequences. It may be recalled that in the cited California experiment (Note 13) those drivers whose licences were coming up for renewal within one year after being informed of the existence of the incentive showed a greater reduction in accident rate than was true for people for whom licence renewal did not become relevant until two or three years later.

33. Murdoch, P.A., and Wilde, G.J.S. Reward and punishment in driver control. – Toronto: Research and Development Division, Ministry of Transportation and Communications, 1980.

34. Wilde, G.J.S., and Murdoch, P.A. "Incentive systems for accident-free and violation-free driving in the general population." Ergonomics 25 (1982): 879-890.

35. For illustrative purposes, the reader is referred to Exhibit A. It contains an easily understandable display of rules (although these rules may not be optimal against other criteria; see e.g., Section 5.8 and the other requirements mentioned in Section 5). This discount/surcharge system is currently in use in West Germany. The 'basic fee' is represented as 100% and the surcharges and discounts are charted as a function of the number of accidents incurred in any given year (on the left) and of the number of accident-free years (on the right). Beginner drivers enter at "Level zero" and pay 175% of the base fee; after one-half year of accident-free driving, their fee is adjusted downward to "Level 1/2", i.e., 125%, *etcetera*.

In the second part of Exhibit A, the consequences of making one or two claims in a given year for the insurance fee that will apply in the subsequent year are tabulated separately for drivers who prior to those claims belonged to various specified levels. So, a driver who has one claim after 7 years of claim-free driving will in the next year have to pay the fee that pertains to Level 3. Note that beyond Level 9 no further discounts are granted, but that it nevertheless continues to be advantageous for the driver to accumulate additional claim-free years. This is because a Level 12 driver, for instance, if he or she has one claim, moves to Level 8, while a Level 11 driver with one claim would move to Level 7.

36. Studies have shown that as many as 34% of traffic casualties treated in hospitals in the city of Rotterdam, the Netherlands, and 75% of child-pedestrian casualties taken to hospitals in Copenhagen, Denmark, were not known to the police. Unreported injury accidents in traffic were proportionally more common in pedestrians, cyclists and moped riders than was true for drivers and underreporting was found to be especially frequent for injured young pedestrians (Kolkman, H.J. "Strategy and tactics in matters of road safety." Paper presented at the conference of the International Federation of Pedestrian Associations, Geilo, Norway, June 24-25, 1976).

37. I.e., to include "the design of an incentive program, or programs, workable in a public sector delivery system, given that the insurance function remained in the private sector", and to contrast this with, "In the alternative, the design of an incentive program workable were the government to take over the delivery of automobile insurance" (letter dated 1987.04.08 from Ms Saskia Oltheten, Econometric Consultant to the "Inquiry Into Motor Vehicle Accident Compensation in Ontario" to the present author).

38. In fact, initial steps towards such a scheme, to be conducted under experimental conditions in Ontario, were taken in 1980 (see the correspondence between Ms Jan Pierce, Ministry of Transportation and Communications, Policy Planning and Research Division, Human and Social Systems, to the present author, dated 1980.08.11).

39. Several years ago, cost-benefit estimates for such a scheme in Ontario have been calculated. Depending on the various estimated average costs of reportable accidents, it was estimated that the safety benefits to the jurisdiction would exceed government's loss in licence-renewal fee revenues, if this countermeasure succeeded in reducing the accident rate in Ontario by as little as between 1.6 and 3.2%. (See pp. 76-80 in Note 33). Please observe that these necessary percentage reductions in accidents are much lower than what was actually achieved in the California experiment (see Section 2.1 and Note 13). In other words, cost-effectiveness of incentive programmes would seem relatively easy to accomplish. So, the reader may wonder why is it that the Ontario government has not acted accordingly, although it commissioned the report in question? For a possible answer, see Section 5.2.2.

40. Problems, relevant to the administration of incentive programmes, that arise from misclassification of drivers have been discussed by Harrington, D.M., and Ratz, M. The effectiveness of an at-home driver's licensing law test. - Sacremento: California Dept. of Motor Vehicles, 1978. Report no. 60. (Also see the reference in Note 13).

41. Ontario Ministry of Health. Annual Report, 1985/86, p. 46. Revenue from OHIP premiums amounted to CDN$ 1,621,705,344 and total health care expenditure to CDN$ 9,263,810,476.

42. This is another way of saying that the higher the accident rate, the greater the insurance industry's opportunity for absolute profit. Apart from a sudden and short-term drop in accidents, the insurance companies cannot rationally be expected to show a positive concern for the reduction of the accident rate. Dr. Patricia Waller (of the University of North Carolina Highway Safety Research Center) commented on "[....] incentives for insurance companies to offer incentives" at a recent highway safety conference in the U.S. She said: "The Insurance Institute for Highway Safety is a very notable exception, but on the whole, I haven't found the insurance industry terribly eager to do things in this area. I have heard it said, and I'm sure there are people here who know whether this is true and could clarify it, that insurance companies to a large extent make their income on cash flow, in which case it may not necessarily be in their best interest to reduce all these costs.[....] I haven't found the kind of response that I expected, and I have also heard that they may not be motivated to do anything to reduce costs". (in Human Behavior and Traffic Safety /ed. by L. Evans and R.C. Schwing. - New York: Plenum Press, 1985, p.380).

In this context, it is noteworthy too that - despite the common practice of allowing drivers premium discounts following specified periods of claim-free driving - to the best of our knowledge no published reports exist on experiments examining the safety consequences of insurance fee manipulation conducted by private insurers. This may be viewed as another symptom of their lack of concern for safety promotion. In passing we may note that the same lack of concern seems to hold for the automobile manufacturing/repair industry: the larger the number of cars 'totalled' in accidents or in need of new parts because of less serious accidents, the greater the opportunity for profit and employment in that industry. "Thus, below the shiny surface of safety and safety promotion - like 'motherhood and applepie' superficially acclaimed by everyone - lurk the rocks of conflict and opposing interests" (Post-diploma Programmes in Occupational Safety and Occupational Hygiene Using Distance Education, Ergonomics course, Section 6, Subtopic 3.2, Humber College, Toronto, Ontario, 1987).

43. See Haight, F.A. "Road safety: A perspective and a new strategy." Journal of Safety Research 16 (1985): 91-98 and Wilde, G.J.S. "Gestion et stratégie de la sécurité routiere: le point de vue d'un chercheur." Proceedings, Symposium sur la gestion de la sécurité routiere au Québec, Montréal, Québec, janvier 1980.

44. Netherlands Parliamentary Proceedings. Debates 13-15, February 1979, Sessions 1978-1979, pp. 3371-3381, The Hague (in Dutch). However, if not satisfied by one example, the reader may be referred to more of these in Plowden, W. The Motor Car and Politics. - London, U.K.: The Bodley Head, 1971.

45. Although the perceived equity of such incentives would depend on their particulars, there is reason to believe that in principle they will be met by a very favourable response from the driving public. A sample of 613 holders of drivers' licences in Kingston and Ottawa, Ontario, were asked in February 1975 to mark their reaction to a wide variety of potential safety measures. One of these was the following proposition: "Establish a system of incentives and rewards for accident-free and violation-free driving (for instance free licence plate renewal for accident-free and violation-free driving in the previous year)". The answers were as follows:

strongly in favour	**60%**
mildly in favour	**25%**
undecided	**6%**
mildly opposed	**5%**
strongly opposed	**4%**

The degree of favourability expressed by individual drivers was found to show no significant association with annual mileage driven, manufacturing year of the car driven, driver's gender, age, age at which licence was first obtained, education level, and a questionnaire for the assessment of personal concern for road safety. It may thus be concluded that public opinion is homogeneous in its support for the countermeasure in question. Unfortunately, no information exists as to why 9% of the respondents expressed opposition. (See Wilde G.J.S., O'Neill, B., and Cannon, D. Driver safety-mindedness and opinions of public policies for accident prevention. – Kingston, Ontario: Department of Psychology, Queen's University, 1975. – Studies of Safety in Transport; and Wilde, G.J.S. "A psychological study of drivers' concern for road safety and their opinions of various public policy measures against drinking and driving." Proceedings, Seventh International Conference on Alcohol, Drugs and Traffic Safety, Melbourne, 23-28 January, 1977, pp. 410-424).

46. The number 79 is arrived at if only those companies doing more than CDN$ 1 million of premium writing in Ontario are considered. See Canadian Underwriter, Statistical Issue, May 1986, pp. 34-35.

47. Allport, G.W. "The ego in contemporary psychology." Psychological Review 50 (1943): 451-478.

48. Atkinson, J.W. "Some general implications of conceptual development in the study of achievement-oriented behavior." Human Motivation. – Lincoln: University of Nebraska Press, 1965.

49. From the point of view of a private insurer, this 'forgiveness clause' would seem to make very good sense. A driver with no accident in 5 years can be considered to be 'a good risk' and the insurer would not like to lose the insurance premium of this customer to the competition.

Insurance companies often give 'stars' (i.e., discounts) to beginner drivers if they have taken driver education prior to acquiring their licence. There is no evidence that such education, as we presently know it, actually produces drivers with fewer accidents (see Stock, J.R. et al. Evaluation of the Safe Performance Secondary School Driver Education Curriculum Demonstration Project: Final Report. – Columbus, Ohio: Battell Columbus Laboratories, 1983; Weaver, J.K. et al. Safe Performance Secondary School Driver Education Curriculum Demonstration

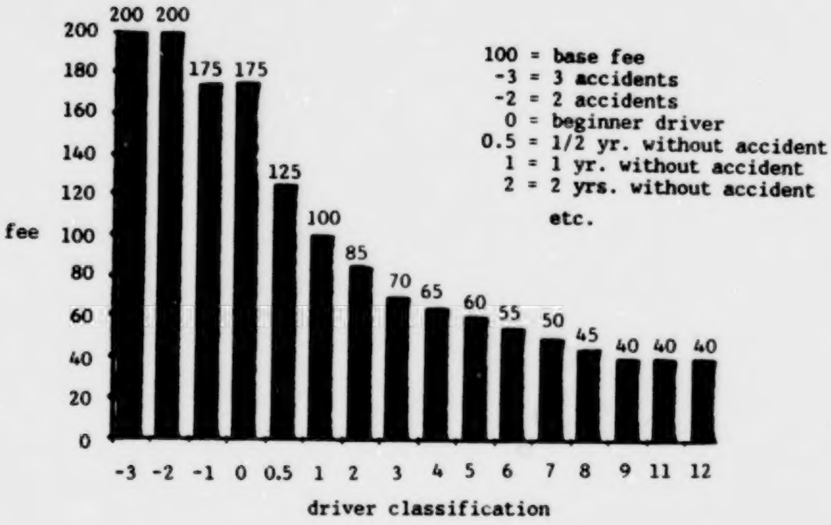
Project. - Springfield, Virginia: National Technical Information Service, 1981. DOT Report no.: DOT HS 806 192). Thus, the justification for the existence of this discount must be sought elsewhere (unless it resides in the belief that driver education makes for safer drivers). The offer of cheaper insurance may increase the inclination to drive (or parents' willingness to let their youngsters use the family car(s)) and thus potentially enlarges the total market of insurees, just as the number of young driver's licence holders has enhanced subsidies for driver education (see Section 2.1. and Note 11). Both factors increase the per capita accident rate.

50. See Young Drivers' Accidents: In Search of Solutions/ed. by D.R. Mayhew, H.M. Simpson and A.C. Donelson. - Ottawa, Ont.: Traffic Injury Research Foundation of Canada, 1985, pp. 82-85.

51. Fox, D.K., Hopkins, B.L., and Anger, W.K. "The long-term effects of a token economy on safety performance in open pit mining." Journal of Applied Behavior Analysis 20 (1987): 215-224. The term 'token economy' is psychological jargon for incentive programme. This paper strengthens the main list of earlier experience mentioned in this report: (a) despite initial skepticism regarding the effectiveness of incentive programmes, (b) actual effectiveness in reducing the accident rate per employee is very high, (c) very favourable benefit/cost ratios, (d) imaginative use of incentives that enhance peer (group) pressure toward accident-free conduct, (e) the need to counteract the inclination to under-report accidents when an incentive programme is in force, and (f) the fact that the incentives originally had the greatest reducing effect upon the more serious accidents and more gradually diminished the less serious ones (see the West German experiment mentioned in Section 2 and Note 17). In the paper by Fox, Hopkins et al., there is no indication whatsoever that the effectiveness of the incentive programme diminished over time. Clearly then, the favourable results cannot be attributed to the mere 'novelty' of the intervention or the so-called 'Hawthorne effect'. The calculated benefit/cost ratios of the programmes varied between 18 and 28 at one mine, and between 13 and 21 at the other.

EXHIBIT A: Example of a simple discount/surcharge scheme. (See Note 35)

1. FEE STRUCTURE



2. DRIVER RECLASSIFICATION FOLLOWING CULPABLE ACCIDENTS

(a) From level:	(b) If 1 claim, to level:	(c) If 2 claims, to level:
13	9	4
12	8	3
11	7	3
10	6	3
9	4	2
8	3	1
7	3	1
6	3	1
5	3	1
4	2	1
3	1	1/2
2	1	1/2
1	1/2	-1
1/2	-1	-2
0	-1	-2
-1	-2	-3
-2	-3	-3
-3	-3	-3

APPENDICES TO VOLUME 1

APPENDIX I

LIST OF PERSONS WHO MADE ORAL AND WRITTEN SUBMISSIONS

LIST OF ORAL SUBMISSIONS

NAME	HEARING LOCATION
A & A CARTAGE	Toronto
- Aldred, Mr.	
ADVOCATES' SOCIETY	Toronto
- Webb, Peter	
- Rachlin, Ted	
AIRPORT TAXICAB ASSOCIATION	Toronto
- Butt, M.	
ALLARD, Edward	Toronto
ALLSTATE INSURANCE COMPANY	Toronto
- Groot, Steve	
- Roberts, J.	
ALTER, W.	Toronto
BAILEY, Dave	Kitchener
BATCHELOR, Dahn	Toronto
BEHAVIOURAL HEALTH INC.	Toronto
- Corey, Dr. David T.	
- Staub, Jane (Jane I. Staub & Associates)	
BELL, R. C.	Toronto
BINKS, Harry	Ottawa
BLACK, R.	Toronto
BONCA, Harry	Toronto
BRENNAN, Lloyd	Ottawa
BROKENSHIRE, John (President, Essex County Law Association)	Windsor
BUSH, Les	Thunder Bay
BUTTS, W. R.	Toronto
CANADIAN BAR ASSOCIATION	Toronto
- Bates, Timothy	
CANADIAN BAR ASSOCIATION - ONTARIO	Toronto
- Thomas, Bruce	
- Fiddler, John	
- Wilson, Janet	
CARLTON COUNTY LAW ASSOCIATION	Ottawa
- Cavanagh, Stephen	
- Parnega, Brian	
CARSON, John K.	Toronto
CASKIE, Jim	London
CAVILL, David	Windsor
CERISANO, Stanley	North Bay
CHARTERS, Dalton	Windsor
CHORNYJ, Greg	North Bay

CITIZENS FOR AUTOMOBILE INSURANCE REFORM	Windsor
- McBain, William	
CO-OPERATORS GENERAL INSURANCE COMPANY	Kitchener
- Scott, Wayne	
CRAIG, Eileen	London
DANDY, Burton	Toronto
DEAN, M. R.	Toronto
DOMINOTO, Connie	Windsor
DUNCAN INSURANCE SERVICES LIMITED	Thunder Bay
- Johnson, Fred B.	
ECONOMICAL MUTUAL INSURANCE COMPANY	Kitchener
- McConnell, Mike	
EISEL, Herman	Toronto
EVERGREEN REHABILITATION SERVICES	Toronto
- Lychenko, Robert	
- Freeman, Aaron	
FAIR (Fair Action in Insurance Reform)	
- McGrenere, Tom	Toronto
- Glass, Jesse	Toronto
- Pensa, Claude	Toronto
- Chapman, Bill	Windsor
FARRON, Chris	London
GILBERT, Gloria	London
GORE MUTUAL INSURANCE COMPANY	Kitchener
- LaPalme, Serge	
GORMAN, John (Nipissing Law Association)	North Bay
GRAY, Robert H.	North Bay
GREAVES, Glen	Toronto
GURAL, Melanie	Toronto
HAMILTON LAW ASSOCIATION	Toronto
- Nolan, Dermot	
HARMAN, Ted	Ottawa
HARPER, John	Kitchener
HARRISON, Blair	Ottawa
HAY, Mrs. I. H.	Toronto
HEAD INJURY ASSOCIATION OF LONDON & DISTRICT	London
- Austin, Guloo	
- Farron, Chris	
- Schaufelberger, W. K.	
HOBSON, Richard	Kitchener
HOUSER, Dana	Kitchener
INSURANCE BROKERS ASSOCIATION OF WATERLOO	Kitchener
- Philpott, Lorne	
INSURANCE BUREAU OF CANADA	Toronto
- Lyndon, Jack	
- Kennedy, Alex	
- Beatty, Gord	

- Miller, Ronald	
- Saunders, Harry	
- Finkelstein, Neil	
INSURERS INSURANCE BROKERS, THE	Toronto
- Wilson, Dave	
- Bray, Charles	
JAGT, Arnold	Toronto
JOHNSON, Gary	London
JOHNSON, Leonora	
JOHNSTON, Carman	Toronto
KATZ, Robert (Bob)	Toronto
KATZMAN, Marsha	Toronto
KINGSWAY GENERAL INSURANCE	Toronto
- Star, William (Bill)	
- Solloway, Jerry	
- Thompson, Murray	
KINRADE, Mr. M.	Toronto
KLEIN, Murray	Toronto
LAMONT, Rosemary	Toronto
LAVIGNE, Mary	Toronto
LEONARD, Mr. John	Toronto
LEVINTER, Mr. B.V.	Toronto
LEWINGTON, John	Kitchener
LINTON, Shirley	Windsor
LONDON CLAIMS ASSOCIATION	London
- Maurer, Peter	
LOS, Douglas	North Bay
MAD (Mothers Against Drunk Drivers)	Windsor
- Walsh, David, President	
- Lillian & Dean Pegg	
MAMOUDIAN, Fan	Toronto
MARINIER, Gilles	North Bay
McCABE, Al	Windsor
McCONNELL, Gregory E.	Toronto
McGLYNN	Kitchener
McKELLAR STRUCTURED SETTLEMENTS INC.	Kitchener
- McKellar, Frank	
McLEAN, Randy	Ottawa
MERSKEY, Dr. Harold	London
MIDDLESEX LAW ASSOCIATION	London
- Neilson, Murray	
- Williams, Dave	
MILLION, Barry	Toronto
MINISTRY OF TRANSPORTATION & COMMUNICATIONS	Toronto
- Wylie, Peter	
MITCHELL, John	Toronto
MITCHELL, Dr. W. M.	North Bay
MOTORCYCLE & MOPED INDUSTRY COUNCIL	Toronto
- Ramsay, Robert	

MURRAY, James	Toronto
NAGEL, Rudy	Toronto
NELSON, Jim	Toronto
NEW DEMOCRATIC PARTY	Toronto
- Swart, Melvin	
OBERHOLTZER, Bob	Kitchener
ONTARIO ADJUSTERS ASSOCIATION	Toronto
- Cameron, James	
ONTARIO CHAMBER OF COMMERCE	Toronto
- Jackson, Linda	
- Tower, Roy	
ONTARIO CHIROPRACTIC ASSOCIATION	Toronto
- Haig, Dr. Robert	
- Smith, D.C.	
ONTARIO MOTOR VEHICLE ACCIDENT ASSOCIATION	Toronto
- Fisher, Alan	
ONTARIO MOTORCYCLE DEALERS ASSOCIATION	Toronto
- MacMillan, Bruce	
ONTARIO MUTUAL INSURANCE ASSOCIATION	Kitchener
- McIntyre, Mel	
ONTARIO RISK & INSURANCE MANAGEMENT SOCIETY	Toronto
- McBey, Kathryn L. F.	
- Meltzer, Susan	
- Hackett, Lloyd	
ONTARIO TRUCKING ASSOCIATION	Toronto
- Schroeder, Alf	
PEARCE, Robert	Toronto
PENSA, Claude	London
PLUMB, Leroy	Toronto
POUDRIER, Dr.	North Bay
PRIDE (People to Reduce Impaired Driving Everywhere)	London
- Wickham, Frank	
RELIABLE TAXI NEWMARKET (1978) LTD.	Toronto
- Gottlieb, Michael	
- Smalley, David	
RITCHIE, Scott	London
ROBB, Mrs. and Brian (son)	Toronto
ROBILLARD, Jim	North Bay
ROMANCHOOK, Terrence John	Windsor
ROSS, Phil	Toronto
ROYAL INSURANCE CANADA	Toronto
- Elms, Roy	
- Williams, Art	
SCHOOL BUS OPERATORS OF ONTARIO	Toronto
- Gordon, Hugh	
SEARLE, James	London
SETON, Mark	Kitchener
SINTAL, Richard	Toronto

SMITH, Don	Thunder Bay
SMITH, Philip	London
SORGE INSURANCE BROKERS LTD.	London
- Sorge, Mario D.	
SPIEGEL, Harvey	Toronto
STATE FARM INSURANCE	Toronto
- MacKenzie, J. R.	
- Fraser, F. Clifford	
- Temple, Carla	
STEIN, David & client	Toronto
STRNISA, Josef	Windsor
SUDBURY & DISTRICT LAW ASSOCIATION	North Bay
- O'Neil, Stephen	
SUNRISE CO-OPERATORS INC.	Toronto
- Dorkin, Larry	
SZALAKI, Alex	Windsor
TAILLEFER, Omer	Toronto
TARNOWSKI, Leonard	Toronto
TATOMIR, John	Windsor
THOMPSON, M.	Toronto
TORONTO TAXICAB BROKERAGE ASSOCIATION	Toronto
- Tory, John	
UBRIACO, Rita	Thunder Bay
VAN TAAK, John	Toronto
VINETTE, Edward	Toronto
WARKENTIN, B.	Toronto
WELLINGTON GENERAL INSURANCE	Toronto
- Collins, George R.	
- Andrachuk, John S.	
- Bertrand, François	
WELSH, Terry - U.S.A.	Windsor
(Speaking on behalf of the Michigan System)	
WILLIAMSON, Tom	London
WILSON, Angus	Ottawa
WRIGGLESWORTH, Edward	Toronto
W. W. CARTAGE LTD.	Toronto
- Sawyer, Harold	
YOUNG DRIVERS OF CANADA	Toronto
- Vézina, Monique	

LIST OF WRITTEN SUBMISSIONS RECEIVED FROM INDIVIDUALS

ADAM, Jacques
ANDERSON, John

BANGAY, A. W.
BATCHELOR, Dahn A.
BEACOCK, Steven
BLACK, Anthony S.
BROWN, Craig
BURRIDGE, Bruce W.

CABOT, J. Richard
CARSON, John K.
CARTWRIGHT, M. R.
CHADBAND, Edward E.
CHMARA, James
CHORNYJ, Gregory B.
COMERY, W. F.
CRABBE, Ronald H.
CROSSE, R. M.

DAWSON, Patricia
DAY, Mrs. M.
DOBRUCKI, Dan

EDDIE, C. R.
ELMS, Roy A.
ENCHIN, Ervin
ENSOM, B. Ernest

FERGUSON, Roderic
FLEMING, Robert
FLEURY, E. R.
FOWLER, Margarate et al.
FREESMAN, Boris G.
FRITZ, Prof. R. E.

GRUDA, E.

JOHNSON, Fred
JOHNSON, G. A.

KAPLAN, Dr. Ronald D.
KATZ, Robert D.
KOSTIUK, Andrew

LEONARD, John

MANN, Paul M.
MAURER, Peter
McCONNELL, Gregory E.
McTAVISH, Willson A.
MERSKEY, Harold
MILLION, Barry
MITCHELL, John H. R.
MIXER, Michael
MOSER, M. B.
MURRAY, J. B. M.

NELSON, A. J.
NOLL, Rhoda

OBERHOLTZER, Bob

PANZER, Stephen
PARMEGA, Brian
PHILPOTT, Lorne
POWELL, John
POYNTER, John G.

REED, Esther P.
REMPEL, H. I.
REMPEL, Raymond G.
RICHARDS, Bradley
RIZZI, Mike
RYAN, Chris

HAMMOND, R. G.
HANSEN, Helen & Robert
HAWKINS, Albert M.
HAY, Mrs. I. H.
HOBSON, Richard J.
HODGSON, J. Kent

TAILLEFER, Omer
TARNOWSKI, Leonard
TOWNSHEND, Gary

SEARLE, James D.
SEGAL, Murray A.
SHAW, Martin P.
SHOUR, Robert A. L.
SMITH, Don
SMITH, Ralph
SPIEGEL, Harvey
STRADIOTTO, Rino A.
STRNISA, Josef
SZALKAI, A. R.

WALES, Ian
WHITE, W.G.
WOOLFORD, Dr. B. J.

LIST OF WRITTEN SUBMISSIONS RECEIVED FROM ASSOCIATIONS

The Advocates' Society
Allstate Insurance Company of Canada
Arbitrators' Institute of Canada Inc.
Association of Canadian Insurers
Behavioural Health Inc. et al.
CAA (Ontario)
Canada Cycle Sports
Canadian Automotive Leasing Association
Canadian Bar Association - Ontario
Canadian Vintage Motorcycle Group
Christian Science Committee on Publication for Ontario
Coachman Insurance Company
Consumers' Association of Canada (Ontario)
Co-operators General Insurance Company
County of Carleton Law Association
Downtown Clinic Physiotherapy & Health Counselling
Economical Mutual Insurance Company
C.R. Eddie Engineering, Inc.
J.F. Enright Insurance Brokers, Inc.
Evergreen Rehabilitation Services Inc.
Fair Action in Insurance Reform (FAIR)
Federation of Canadian Municipalities
Hamilton Automobile Club
Hamilton Law Association
Head Injury Association of London & District
Institute of Law Research & Reform
Insurance Brokers Association of Ontario
Insurance Brokers Association of Waterloo
Insurance Bureau of Canada
Insurers' Advisory Organization Inc.
Kingsway General Insurance Co.
London Bar Association
McKellar Structured Settlements Inc.
Medico-Legal Society of Toronto
Motorcycle & Moped Industry Council and
  The Canadian All-Terrain Vehicle Distributors Council
Munich Reinsurance Company of Canada
Municipal Affairs, Ministry of
New Democratic Party
Niagara Falls Taxi Ltd.
Ontario Advisory Council on Physically Handicapped
Ontario Chamber of Commerce
Ontario Chiropractic Association
Ontario Head Injury Association
Ontario Motorcycle Dealers Association
Ontario Motor Vehicle Accident Association

Ontario Mutual Insurance Association
Ontario Risk & Insurance Management Society
Ontario Trucking Association
Ontario Water Ski Association
Persons United for Self Help in Ontario
Phillips & Moore Insurance Brokers Ltd.
Pilipino Bayanihan of Mississauga
Powell Motorsport Management Inc.
PRIDE (People to Reduce Impaired Driving Everywhere)
Reinsurance Research Council
Reliable Taxi Newmarket (1978) Ltd.
Royal Insurance Co., Canada
Royal Ottawa Regional Rehabilitation Centre
Skillen-Squire Insurance Services Ltd.
Sorge Insurance Brokers Ltd.
State Farm Insurance Companies
Sunrise Co-operative Inc.
Toronto Taxicab Brokerages Association
Tourism and Recreation, Ministry of
Trial Lawyers Association of British Columbia
Wellington Insurance Company
Young Drivers of Canada
Zehr Insurance Brokers Ltd.
Zurich Insurance Company

APPENDIX II

LIST OF PERSONS CONTACTED

ACKER, Rodney
ASHBY, R. Mira
ATKEY, Jane

BALLOTT, Martin
BARNES, Paul
BATES, Tim
BAXTER, Bill
BEATTY, Gord
BELOBABA, Edward
BERGERON, Normand
BLACK, Anthony
BORIN, Jim
BORKENHAGEN, Peter
BRAY, Charles
BREEN, Mary
BRITT, Glen
BROWN, Mary
BUCKLASCHUCK, Hon. John
BURKETT, Michael

CAMI, Moby
CARTER, R. E.
CHELLEW, Gord
CHUTE, Brian
COOKE, Walter

DANZON, Patricia
DAVIS, Robert
DRAPER, John

EATON, Wayne
ELAIS, Roy

FINK, Bernhard

GAUDRY, Marc
GELINAS, Claude
GIBSON, Grant
GLASS, Jesse
GORDON, Chuck
GRAHAM, Murray

HALPERN, Paul
HAMMOND, Grant
HANSER, Linda
HAUER, Ezra
HAUGHY, Des
HICKLING, Herb
HILL, Sam
HOGG, Peter
HOLLINRAKE, Bud
HOLMES, Tom
HOLT, Bill
HUNTER, Robert

ISON, Terry

JOHNSON, Joan
JOHNSON, Patrick
JOHNSON, Robert
JOOST, Robert
JONES, C.R.

KAPLAN, Ron
KAPOOR, Shant
KLAR, Lewis
KYLE, Bill

LEVIN, Murray
LINDEN, Mr. Justice Allen
LOGAN, Gary
LYNDE, Richard
LYNDON, Jack

MAGNESUM, Eric
MAIDMAN, Veronica
MARTIN, Ken
MARTIN, Roger
MASTERSON, Stephen
McARTHUR, John
McCARTHY, Mike
McKAY, Donald

HALL, Mr. Justice Gordon

NEWCOMBE, Tom
NEWTON, Brian
NICHOLSON, Jack
NOLET, Charles

O'CONNELL, Jeffrey
O'DONNELL, Vince
O'MALLEY, Tom
OSBORNE, Phillip

PARADIS, Gilles
PETERSON, Don
PICKARD, Madam Justice Ellen
PETRISHEN, T.M.
PRICHARD, J. Robert S.

QUELLER, Fred

RAMSAY, Glen
RAPHAEL, Bert
REA, Sam
REMPEL, Raymond
RICHARDS, Ed
RINGSTROM, Dennis
ROWE, Kirby

SAUNDERS, Harry
SAUVAGEAU, Léon-Paul
SCHRADER, Richard
SCHWARTZ, Gary
SEGAL, Murray
SIGURDSON, S. Glenn
SILVER, Robert
STAPLETON, John
STAR, Bill
STAUB, Jane
SUGARMAN, Stephen
SWARTZ, Lee

TAYLOR, Terry
THOMPSON, George
THOMPSON, Murray
TREBILCOCK, Michael

McKELLAR, Frank
MIELOCK, Cindy
MILLER, Sheldon
MILLER, Shelley
MURRAY, J.B.M

VINETTE, Edward

WACHOWICH, Mr. Justice Allen
WADDAMS, Stephen
WALKE, R. J.
WALSH, Richard
WARREN-BOULTON, Frederick
WEBBER, Peter
WEIR, John P.
WELLS, Linda
WESTER, Gerald
WEXLER, Steven
WILDE, Alex
WILDE, Gerald

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APPENDIX III

Motor Vehicle Claims Surveys

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Report on Motor Vehicle Claims Surveys

Bodily Injury Claim Survey Questionnaire (Blue Form)

Summary Analysis of Motor Vehicle Bodily Injury Claim Survey (Blue Form)

Accident Benefit Claim Survey Questionnaire (Yellow Form)

Summary Analysis of Motor Vehicle Accident Benefit Claim Survey (Yellow Form)

Bodily Injury Claims Information Sheet (Green Form)

Summarized Results from Supplementary Bodily Injury Claims Survey

Report on the Change in Loss Cost as a Result of Changes in Accident Benefits and Compensation Issues

REPORT ON MOTOR VEHICLE CLAIMS SURVEY

Objectives

We have been retained by Mr. Justice Coulter A. Osborne, Commissioner of the Inquiry Into Motor Vehicle Accident Compensation in Ontario, to conduct three surveys of Ontario automobile insurance claims.

The purpose of these surveys was to determine who is injured; who is compensated; who is not compensated; how much compensation is paid; the breakdown of compensation paid through first and third party automobile insurance; and from what sources compensation is paid. The surveys were also designed to identify transaction costs. The claims surveys were thus designed to:

1. Break down the claims paid into their major components in order to determine what was paid for specific kinds of compensation, including:
    - (a) *Family Law Reform Act*/*Family Law Act*
    - (b) prejudgment interest
    - (c) gross-up
    - (d) past income loss
    - (e) future income loss
    - (f) non-pecuniary loss
    - (g) party and party costs
    - (h) future care costs

2. Compile a profile of both accidents (type of accident and degree of fault) and the injured making first or third party claims (socio-economic characteristics of claimants, type and extent of injuries, role of claimants in accidents and estimates of actual losses).

3. Collect information concerning processing of the claims. This included information on the timeliness of payments and settlement, the use

of counsel and the courts, the amount of payments made and the transaction costs involved.

4. Collect information concerning the amount of compensation those injured in motor vehicle accidents received from collateral sources.

To deal with these issues, we designed and conducted three surveys, two with respect to bodily injury claims and, one involving accident benefits claims.

Methodology

In early March, 1987, we designed two independent claims surveys. The first survey covered Ontario automobile third party bodily injury liability claims closed during 1986 (the B.I. survey); the second survey covered accident-benefits claims for accidents which occurred in 1985 (the A.B. survey); the third survey was designed to capture data unavailable in the first survey, specifically collateral source information (the C.S. survey). For the purposes of this report, the results of the third survey were treated as part of the bodily injury liability claims survey.

Accepted statistical sampling techniques were used. Each sample contained approximately 2% of the total claims in each category. Statistical sampling generally uses a much smaller percentage of the total population, but because of the detail required and the number of possible responses to each question in our surveys, a larger sample size was used. In total, we accepted 1,594 forms out of 1,619 submitted from the B.I. survey; 1,528 claims from the 1,702 submitted from the A.B. survey and 1,347 forms from the 1,403 submitted for the C.S. survey. Statistical theory suggests that this sample size is sufficient to reproduce a reasonable representation of automobile insurance claims and claimants in Ontario.

To ensure that the sample accurately represented the geographic distribution of claims across the province and the mix of vehicle types, two controls were placed on the random sampling process. We analysed the confidential claims information of 15 large automobile insurance companies provided to us by the Insurance Bureau of Canada; from these 15 companies, an appropriate number was chosen (9 for the B.I. survey and 12 for the A.B. survey) so that the resulting sample would exhibit a claims distribution by region similar to that of the entire industry. Because differences in distribution systems were considered to be significant, each sample contained either one or two direct-writing companies. To ensure that the samples accurately reflected the mix of vehicle types, we drew the claims from three strata: private passenger cars, commercial trucks and motorcycles. The results from each group were then appropriately weighted to reflect the prominence of each in the total vehicle population.

Bodily Injury Liability Claims Survey.

The nine insurers were asked to submit, in either magnetic form or hard copy, a complete list of Ontario automobile bodily injury claims with settlement dates in 1986. To eliminate uncertainty arising from the adequacy of reserves, only closed liability claims were used. We determined the number of claims required from each company, necessary to reflect geographic distribution and differences in marketing methods; we then randomly selected the required number of claims for analysis. The companies were given claim identification numbers and instructions for completing the survey forms.

Internal Verification During Course of Survey

To determine if our sample size was adequate, when one-third of the data was returned, we analyzed the results of that data; we continued to monitor the results as additional data were received.

An inadequate sample would have exhibited significant variations in the distribution of the data; we found that from the one-third point forward distributions were consistent with those in the preliminary analysis. We therefore concluded that increasing the sample size was not necessary to the reliability of the survey.

External Verification by Result

Three specific external checks corroborated the results of the Bodily Injury Liability Survey.

The first concerned the components of bodily injury claims. In 1986, the Insurance Bureau of Canada conducted a claims survey using only bodily injury claims in excess of $25,000. An examination of the data in claims over $25,000 in our sample reflected a distribution very similar to that of the industry study.

The second check was a gross weekly wage comparison. The average gross weekly wage for liability claimants in the claims survey was $428. The Ontario weekly industrial wage in 1986 was $427.31; thus, the liability claimants considered in the bodily injury claims survey were representative of the provincial average. The accident-benefit claimants on the other hand, had an average gross weekly wage of only $378. This was to be expected and is due to the second payor feature of A.B. coverage. Those with higher than average earnings usually had employment-related benefits. They may have either been ineligible for benefits, or decided not to file a claim.

The third check was an age distribution comparison of bodily injury and accident benefit claimants with Ministry of Transportation and Communications drivers involved in accidents data. It is apparent from the table below that the percentage of liability and accident benefit claimants in each age group corresponds very closely to the percentage of drivers involved in accidents from each age group.

Age	Licensed Drivers*	Drivers involved in accidents*	Liability Claimants	Accident Benefit Claimants
Under 16	-	0.1	6.4%	6.1%
16 - 20	7.3%	13.8	13.3%	13.0%
21 - 24	10.1%	14.6	13.7%	16.8%
25 - 34	25.5%	26.1	26.8%	24.8%
35 - 44	21.3%	18.0	17.4%	16.6%
45 - 54	14.5%	10.8	10.5%	10.8%
55 - 64	12.1%	7.7	6.9%	7.9%
65 & over	9.3%	4.8	4.8%	3.95
Unknown	-	4.0	-	-

*From: 1985 Ontario Road Safety Annual Report, Table 2.22.

Supplementary Bodily Injury Claims/Collateral Source Survey

The first Bodily Injury Survey produced insufficient information in two areas: collateral benefits and gross-up. Much of this problem was the result of the companies' failure to maintain records on these subjects. We therefore conducted a supplementary survey to capture this information. Thirty-five insurers, constituting 90% of the Ontario automobile insurance market, were asked to participate. All Ontario automobile bodily injury claims closed by the relevant insurers between April 13 and May 24, 1987 were examined. An independent on-site file audit confirmed the high quality of the data. This second bodily injury survey developed reliable data on collateral benefits. It did not provide useful data on gross-up.

Accident Benefits Claim Survey

After determining the number of claims required from each insurer to reflect proper geographic representation and marketing methods, we asked each of 12 insurers to submit a complete list of Ontario accident-benefit claims with accident dates in 1985. From each list we randomly drew the predetermined number of claims. Each insurer was given the claim identification numbers selected and instructions for completing the form.

Accident-benefit claims involving permanent disability may remain outstanding for decades. Because we wanted to include some permanent disability claims in the sample, we decided to accept outstanding claims as well as closed claims. This did not detract from the reliability of the data since, in our experience, reserves for unpaid accident-benefit claims are reasonably accurate.

Internal Verification During the Course of the Accident Benefit Survey

In order to ensure that the sample size was sufficiently large, we performed a check similar to that done for the B.I. survey. We observed reasonably stable results as the Accident Benefits survey data were compiled. We concluded that increasing the sample size was not necessary to the reliability of the data.

Note:

Throughout the report, two terms have specific meaning in an insurance context and the following should be noted:

1. Claim

A claim is a file in which one or more claimants have received or will receive payments from the insurance company reporting the data. A claim can be for first party coverage or third party liability coverage.

An insurance company participating in both surveys may report a third party liability claim and a first party accident-benefit claim arising from the same accident, if both claims were in our respective samples.

2. Claimant

A claimant is a person who has either received or will receive payment from the insurance company reporting the data. A person who makes a claim, but does not receive payment, is not considered a claimant in this survey.

These definitions may not be the same as those used by the insurance companies.

The Insurance Bureau of Canada defines a claim differently in its statistical plan. It does not define claimant.

BLUE FORM

General Instructions

---

1. Indicate company number, your initials and claim number clearly for future reference.

2. This survey form is to be completed for each claimant. For example, if an accident gives rise to three claimants, three separate forms have to be completed.

3. All dollar figures are in whole dollars. Absolutely no cent should be shown.

4. All dollar figures which should balance to the answers of other questions will be checked.

5. All dates are in international convention. They are shown as year, month and day.

6. Do not leave date blank. Use UN for unknown only if the information is unavailable.

7. Where a dollar amount is expected, a blank will imply 0. If there is no information to make an estimate, use UN for unknown.

8. Where a check mark "X" or a selection "a number" is expected, you MUST pick the most appropriate category. Otherwise, the form will be returned.

10 March 1987

MOTOR VEHICLE B.I. CLAIM SURVEY

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[1] Company number |__|__|__|__|

[2] Your initials |__|__|__|__|

[3] Claim number |__|__|__|__|__|__|__|__|__|__|__|__|__|

[4] Claimant number |__|__|

[5] Coverage (check one box) |__| B.I. |__| SEF 42/44

[6] Policy limit (section A) |__|__|__|__|0 |0 |0 | Complete the next limit figure if applicable, limit has been reduced to |__|__|__|__|0 |0 |0 | due to breach of policy conditions.

[7] Claimant category |__|

1: third party driver

2: third party passenger

3: named insured driver

4: named insured passenger in insured's vehicle

5: passenger (not named insured) in insured's vehicle

6: pedestrian

7: other

[8] Sex of claimant |__| 1: male 2: female

[9] Age of claimant |__|__| as of the date of accident

[10] Accident type |__| 1: single vehicle 2: multiple vehicle

[11] Vehicle type |__| insured's vehicle |__| claimant's vehicle
1: car 2: truck/van 3: motorcycle 4: bus 5: snow vehicle 6: ATV

[12] Degree of fault (based on your assessment): your insured |__|__|__| %
claimant |__|__|__| % The two figures need not add up to 100%.

[13] IBC statistical territory code |7_|__|__| of your insured vehicle.

[14] Place of accident (check one box) ☐ Ontario ☐ Quebec
☐ other jurisdictions in Canada ☐ U.S.A.

[15] IBC class code |__|__|

[16] Date of accident YY |1|9|__|__| MM |__|__| DD |__|__|

[17] Date when B.I. reserve was opened YY |1|9|__|__| MM |__|__| DD |__|__|

[18] (a) Was there any request by the plaintiff/representative to have payment in advance ☐ Yes ☐ No

(b) Did your company offer to make payment in advance ☐ Yes ☐ No

(c) Date of first payment to claimant in advance
YY |1|9|__|__| MM |__|__| DD |__|__|
If there was no payment in advance, ☐ check here and indicate 0 in question 19.

[19] Amount of first payment to claimant $ |__|__|__|__|__|__|
Total amount of payment in advance $ |__|__|__|__|__|__|

[20] First verbal offer to settle was made by ☐ claimant/representative
☐ your company ☐ neither party (i.e. no verbal offer was made)
Date of the first verbal offer to settle
YY |1|9|__|__| MM |__|__| DD |__|__|

[21] First written offer to settle was made by ☐ claimant/representative
☐ your company ☐ neither party (i.e. no written offer was made)
Date of first written offer to settle

YY 1 9 ☐ ☐ MM ☐ ☐ DD ☐ ☐

[22] Date of settlement (i.e. last payment to claimant)
YY 1 9 ☐ ☐ MM ☐ ☐ DD ☐ ☐

[23] Condition of claimant ☐ 1: deceased 2: injured

[24] Type of injury (Check more than one if necessary)
INSTRUCTION: first check the part(s) of the body injured, then check the type(s) of injury corresponding to the part of the body.

Part of Body	Description of Injury
☐ 99 none	☐ nominal value (shaken up) ☐ psychological trauma
☐ 0 brain or spinal column	☐ paraplegic or quadraplegic or vegetative state ☐ other
☐ 1 head	☐ fracture ☐ concussion
☐ 2 face	☐ fracture ☐ laceration with scar ☐ laceration - no scar
☐ 3 eye	☐ partial loss or loss of use of 1 or 2 eyes ☐ total loss or loss of use of 1 or 2 eyes
☐ 4 ears	☐ partial loss or loss of use of 1 or 2 ears ☐ total loss or loss of use of 1 or 2 ears
☐ 5 nose	☐ resulting in disfigurement ☐ no disfigurement
☐ 6 teeth and jaw	☐ fracture ☐ loss of teeth ☐ other

[24] Continued

Part of Body	Description of Injury
☐ 7 voice and larynx	☐ loss of voice ☐ other
☐ 8 neck	☐ soft tissue ☐ vertebrae/disc fracture ☐ psychological trauma
☐ 9 back	☐ soft tissue ☐ vertebrae/disc fracture ☐ psychological trauma
☐ 10 chest and ribs	☐ fracture ☐ other
☐ 11 internal organs	☐ surgery is required ☐ other
☐ 12 shoulder	☐ soft tissue ☐ fracture ☐ laceration ☐ other
☐ 13 arm and hand	☐ fracture ☐ loss of arm or hand ☐ loss of both arms or hands ☐ laceration ☐ loss of fingers ☐ other
☐ 14 elbow	☐ fracture ☐ other
☐ 15 wrist	☐ fracture ☐ other
☐ 16 pelvis and hip	☐ fracture ☐ other
☐ 17 leg and foot	☐ fracture ☐ loss of leg or foot ☐ laceration ☐ loss of both legs or feet ☐ other
☐ 18 knee	☐ soft tissue ☐ fracture ☐ other
☐ 19 ankle	☐ fracture ☐ other

[25] Employment | | 1: employed 4: retired 7: preschooler
2: homemaker 5: unemployed 8: other
3: student 6: employed part-time

[26] Type of employment | | 1: self-employed 3: clerical
2: managerial/professional 4: manual

[27] Gross employment income (weekly) $ | | | | | |

[28] Amount of actual time loss | | Yrs. | | | Mos. | | | Weeks including intermittent time off. Use your best estimate here, do not leave it blank.

[29] Total gross amount of payment to claimant, including costs, disbursements and prejudgement interest $ | | | | | | | | This amount MUST equal to the sum of 30 (a), (b), (c) and (d).

[30] Settlement, or breakdown of award if case tried:

(a) Special damages (net of Section B):

loss of employment income to trial or settlement $ | | | | | | | | |
other income loss $ | | | | | | | | |
medical and hospital (above OHIP) $ | | | | | | | | |
funeral expense $ | | | | | | | | |
other $ | | | | | | | | |
sub-total $ | | | | | | | | |

(b) General damages (net of Section B if applicable):

non-pecuniary $ | | | | | | | | |
FLRA/FLA [must equal 31 (a) + (b) +(c)] $ | | | | | | | | |
future employment income $ | | | | | | | | |
future care $ | | | | | | | | |
gross-up for tax $ | | | | | | | | |
fund management $ | | | | | | | | |
sub-total $ | | | | | | | | |

[30] Continued

(c) Party to party costs including disbursements $ ☐☐☐☐☐☐☐☐

(d) Prejudgement interest $ ☐☐☐☐☐☐☐☐

☐ stated in settlement

☐ estimated

[31] Family Law Reform Act/Family Law Act claims:

(a) Spouse: Amount paid $ ☐☐☐☐☐☐☐☐

(b) Children: Number of claimants ☐☐

Number of claimants paid ☐☐

Amount paid $ ☐☐☐☐☐☐☐☐

(c) Other relatives and others: Number of claimants ☐☐

Number of claimants paid ☐☐

Amount paid $ ☐☐☐☐☐☐☐☐

[32] Breakdown of internal expenses (exclude staff adjuster):

(a) Fees paid to insurer's lawyer $ ☐☐☐☐☐☐☐☐

(b) Fees allocated to in-house lawyer $ ☐☐☐☐☐☐☐☐

(c) Cost of independent adjuster $ ☐☐☐☐☐☐☐☐

(d) Cost of defence medical $ ☐☐☐☐☐☐☐☐

(e) Cost of other experts $ ☐☐☐☐☐☐☐☐

(f) Other $ ☐☐☐☐☐☐☐☐

TYPE OF COLLATERAL BENEFITS For questions 33 to 35: Try your best to fill in the amount. Use the unknown box only if you have no information.

[33] Section B benefits ☐ unknown

medical $ ☐☐☐☐☐☐☐☐

rehabilitation $ ☐☐☐☐☐☐☐☐

disability $ ☐☐☐☐☐☐☐☐

housewife disability benefit $ ☐☐☐☐☐☐☐☐

funeral $ ☐☐☐☐☐☐☐☐

death $ ☐☐☐☐☐☐☐☐

Quebec Part III $ ☐☐☐☐☐☐☐☐

total $ ☐☐☐☐☐☐☐☐

[34] Employer salary continuance programs ☐ unknown

Sick leave with pay ☐☐☐ % salary , $ ☐☐☐☐☐☐☐☐

Short term disability ☐☐☐ % salary , $ ☐☐☐☐☐☐☐☐

Long term disability ☐☐☐ % salary , $ ☐☐☐☐☐☐☐☐

[35] Government programs ☐ unknown

U.I.C. $ ☐☐☐☐☐☐☐☐

C.P.P. $ ☐☐☐☐☐☐☐☐

Workers' Compensation $ ☐☐☐☐☐☐☐☐

Other $ ☐☐☐☐☐☐☐☐

[36] Date when your company received the first medical report

YY |1|9|☐☐ MM ☐☐ DD ☐☐ ☐ none was received

[37] Additional information (check yes or no):

	YES	NO
(a) Was claimant represented by counsel?	☐	☐
(b) Was action commenced?	☐	☐
(c) Was there examination for discovery?	☐	☐
(d) Was case pre-tried?	☐	☐
(e) Was case tried by jury?	☐	☐
(f) Was there an appeal?	☐	☐
(g) If appealed, was case appealed by plaintiff?	☐	☐

[38] If claim settled, indicate when settlement was concluded (check only ONE):

(a) before action commenced ☐

(b) after action commenced but before examination for discovery ☐

(c) after examination for discovery but before pre-trial ☐

(d) at pre-trial or as an immediate consequence (i.e. within 10 days) of pre-trial ☐

(e) between pre-trial and date action called for trial ☐

(f) at trial ☐

[39] Did gross value of claim exceed policy limit in question 6?

☐ Yes ☐ No

If yes, what was the gross value $ |__|__|__|__|0|0|0|

[40] Was the claim a structured settlement? ☐ Yes ☐ No

If yes, answer the following:

(a) gross amount of claim [from question 29] $ |__|__|__|__|__|__|__|__|

(b) interim and other payments $ |__|__|__|__|__|__|__|__|

(c) party to party costs [from 30 (c)] $ |__|__|__|__|__|__|__|__|

(d) cost of annuity [must equal
40 (a) - (b) - (c)] $ |__|__|__|__|__|__|__|__|

(e) brokerage fee or other fee (if known) $ |__|__|__|__|__|__|__|__|

SUMMARY ANALYSIS OF MOTOR VEHICLE B.I. CLAIM SURVEY (BLUE FORM)

QUESTION 6

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	716	371	74	1161
NUMBER USEABLE	716	370	74	1160

POLICY LIMIT OF INSURED	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
UP TO $200,000	7.4	8.1	36.5	7.7
$300,000	8.8	3.8	8.1	8.4
$500,000	49.4	28.1	47.3	47.9
$1,000,000	32.5	53.5	6.8	33.8
OVER $1,000,000	1.8	6.5	1.4	2.1

QUESTION 7

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

CLAIMANT CATEGORY	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
THIRD PARTY DRIVER	58.7	58.7	28.6	58.4
THIRD PARTY PASSENGER	24.6	26.3	12.1	24.6
NAMED INSURED DRIVER	0.2	0.2	1.1	0.2
NAMED INSURED PASSENGER	1.6	0.9	7.7	1.7
PASSENGER (NOT NAMED INSURED)	6.2	5.4	36.3	6.4
PEDESTRIAN	7.6	7.0	12.1	7.6
OTHER	1.1	1.4	2.2	1.1

QUESTION 8

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

SEX OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
MALE	54.0	52.4	52.7	53.9
FEMALE	46.0	47.6	47.3	46.1

QUESTION 9

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1370	548	89	2007

AGE OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
LESS THAN 16 YRS	6.1	8.6	16.9	6.4
16 TO 18 YRS	5.8	4.9	14.6	5.9
19 TO 20 YRS	7.5	6.0	11.2	7.5
21 TO 22 YRS	7.3	6.4	10.1	7.3
23 TO 24 YRS	6.5	5.3	5.6	6.4
25 TO 29 YRS	14.9	11.3	13.5	14.6
30 TO 34 YRS	12.0	14.1	11.2	12.2
35 TO 39 YRS	10.6	9.9	7.9	10.5
40 TO 44 YRS	7.0	7.3	1.1	7.0
45 TO 49 YRS	5.5	6.8	1.1	5.5
50 TO 54 YRS	4.9	7.8	2.2	5.1
55 TO 59 YRS	3.6	4.2	4.5	3.7
60 TO 64 YRS	3.3	2.6	0.0	3.2
65 TO 69 YRS	2.1	2.4	0.0	2.1
MORE THAN 69 YRS	2.8	2.6	0.0	2.7

QUESTION 10

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	716	371	74	1161
NUMBER USEABLE	716	371	74	1161

TYPE OF ACCIDENT	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
SINGLE VEHICLE	13.7	12.1	33.8	13.8
MULTI VEHICLE	86.3	87.9	66.2	86.2

QUESTION 11

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	716	371	74	1161
NUMBER USEABLE	646	181	61	888

ACCIDENT VEHICLES		PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
INSURED	OTHER				
CAR	- SINGLE VEHICLE	13.2	0.0	0.0	12.1
CAR	- CAR	75.9	0.0	0.0	69.8
CAR	- TRUCK	6.8	0.0	0.0	6.3
CAR	- MOTORCYCLE	3.9	0.0	0.0	3.6
CAR	- OTHER	0.3	0.0	0.0	0.3
INSURED	OTHER				
TRUCK	- SINGLE VEHICLE	0.0	9.9	0.0	0.7
TRUCK	- CAR	0.0	73.5	0.0	5.1
TRUCK	- MOTORCYCLE	0.0	12.7	0.0	0.9
TRUCK	- TRUCK	0.0	2.8	0.0	0.2
TRUCK	- OTHER	0.0	1.1	0.0	0.1
INSURED	OTHER				
MOTORCYCLE	- SINGLE VEHICLE	0.0	0.0	32.8	0.3
MOTORCYCLE	- CAR	0.0	0.0	49.2	0.5
MOTORCYCLE	- TRUCK	0.0	0.0	1.6	0.0
MOTORCYCLE	- MOTORCYCLE	0.0	0.0	16.4	0.2
MOTORCYCLE	- OTHER	0.0	0.0	0.0	0.0

QUESTION 12

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1386	546	89	2021

DEGREE OF FAULT OF INSURED	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
NONE	1.6	2.0	2.2	1.6
LESS THAN 100%	12.6	11.2	25.8	12.7
100%	85.8	86.8	71.9	85.7

QUESTION 13

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	716	371	74	1161
NUMBER USEABLE	716	371	74	1161

IBC STATISTICAL TERRITORY	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
METRO TORONTO	39.7	32.1	27.0	39.0
URBAN (NOT TORONTO)	38.7	36.7	35.1	38.5
RURAL	21.6	31.3	37.8	22.5

QUESTION 14

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
UMBER OF RECORDS	716	371	74	1161
UMBER USEABLE	716	371	74	1161

LACE OF ACCIDENT	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
NTARIO	98.9	97.6	98.6	98.8
UEBEC	0.3	0.0	0.0	0.3
THER PROVINCES	0.1	0.8	1.4	0.2
SA	0.7	1.6	0.0	0.8

QUESTION 16

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
UMBER OF RECORDS	716	371	74	1161
UMBER USEABLE	716	371	74	1161

EAR OF ACCIDENT	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
URING OR BEFORE 1981	4.7	6.7	5.4	4.9
URING 1982	5.4	8.6	4.1	5.7
URING 1983	9.4	10.0	20.3	9.5
URING 1984	17.0	19.9	23.0	17.3
URING 1985	31.3	38.3	27.0	31.7
URING 1986	32.1	16.4	20.3	30.9

QUESTION 18 A & B

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
UMBER OF RECORDS	1394	555	91	2040
UMBER USEABLE	1394	555	91	2040

DVANCED PAYMENT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
EQUEST BY PLAINTIFF	3.8	4.5	4.4	3.9
FFER BY COMPANY	7.8	6.7	13.2	7.8
ONE	90.6	89.9	85.7	90.5

QUESTION 18C

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	130	50	15	195

TIME TILL ADVANCED PAYMENT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
WITHIN ONE MONTH	21.5	6.0	33.3	20.6
1 TO 2 MONTHS	4.6	6.0	6.7	4.7
2 TO 3 MONTHS	7.7	0.0	0.0	7.1
3 TO 4 MONTHS	4.6	8.0	6.7	4.9
4 TO 5 MONTHS	3.1	6.0	6.7	3.3
5 TO 6 MONTHS	5.4	4.0	13.3	5.4
6 TO 9 MONTHS	10.8	12.0	0.0	10.7
9 TO 12 MONTHS	9.2	14.0	6.7	9.5
12 TO 24 MONTHS	21.5	26.0	26.7	21.9
24 TO 36 MONTHS	8.5	12.0	0.0	8.6
36 TO 48 MONTHS	2.3	4.0	0.0	2.4
48 TO 60 MONTHS	0.8	0.0	0.0	0.7
MORE THAN 60 MONTHS	0.0	2.0	0.0	0.1

QUESTION 22

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1362	542	89	1993

TIME TILL CLAIM SETTLED	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
WITHIN ONE MONTH	14.6	9.0	14.6	14.2
1 TO 2 MONTHS	5.6	3.3	9.0	5.5
2 TO 3 MONTHS	5.7	3.1	4.5	5.5
3 TO 4 MONTHS	5.4	4.4	2.2	5.3
4 TO 5 MONTHS	4.3	3.5	2.2	4.2
5 TO 6 MONTHS	3.8	2.2	1.1	3.7
6 TO 9 MONTHS	9.4	8.1	5.6	9.3
9 TO 12 MONTHS	8.1	8.9	7.9	8.1
12 TO 24 MONTHS	23.9	29.5	16.9	24.2
24 TO 36 MONTHS	10.3	12.2	21.3	10.5
36 TO 48 MONTHS	5.8	7.6	9.0	6.0
48 TO 60 MONTHS	1.7	5.4	4.5	2.0
MORE THAN 60 MONTHS	1.6	2.8	1.1	1.7
MEDIAN TIME (in months)	10.0	15.0	15.0	10.4

QUESTION 23

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

CONDITION OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
DECEASED	1.8	2.9	1.1	1.9
INJURED	98.2	97.1	98.9	98.1

QUESTION 24

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

TYPE OF INJURY	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
NONE				
NOMINAL VALUE (SHAKEN UP)	10.6	7.4	9.9	10.4
PSYCHOLOGICAL TRAUMA	1.1	0.5	1.1	1.1
BRAIN OR SPINAL COLUMN				
PARAPLEGIC, QUADRAPLEGIC OR VEGETATIVE STATE	0.1	0.4	0.0	0.1
OTHER	0.6	0.5	0.0	0.6
HEAD				
FRACTURE	0.4	1.1	1.1	0.4
CONCUSSION	5.0	5.6	11.0	5.1
FACE				
FRACTURE	0.1	0.4	1.1	0.2
LACERATION WITH SCAR	2.4	1.6	0.0	2.4
LACERATION - NO SCAR	2.8	5.2	4.4	3.0
EYES				
PARTIAL LOSS OR LOSS OF USE OF 1 OR 2 EYES	0.4	0.7	0.0	0.4
TOTAL LOSS OR LOSS OF USE OF 1 OR 2 EYES	0.0	0.0	0.0	0.0
EARS				
PARTIAL LOSS OR LOSS OF USE OF 1 OR 2 EARS	0.2	0.0	0.0	0.2
TOTAL LOSS OR LOSS OF USE OF 1 OR 2 EARS	0.0	0.0	0.0	0.0
NOSE				
RESULTING IN DISFIGUREMENT	0.2	0.2	1.1	0.2
NO DISFIGUREMENT	0.5	1.3	2.2	0.6
TEETH AND JAW				
FRACTURE	0.5	0.4	3.3	0.5
LOSS OF TEETH	0.9	0.9	2.2	0.9
OTHER	1.4	0.7	2.2	1.4
VOICE AND LARYNX				
LOSS OF VOICE	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0
NECK				
SOFT TISSUE	58.7	58.9	27.5	58.4
VERTABRAE/DISC FRACTURE	0.6	0.5	1.1	0.6
PSYCHOLOGICAL TRAUMA	3.4	2.9	1.1	3.3
BACK				
SOFT TISSUE	36.7	35.3	20.9	36.5
VERTABRAE/DISC FRACTURE	0.7	1.8	1.1	0.8
PSYCHOLOGICAL TRAUMA	1.5	3.6	0.0	1.6
CHEST AND RIBS				
FRACTURE	1.3	2.3	1.1	1.4
OTHER	5.1	4.3	4.4	5.0

QUESTION 24 continued

TYPE OF INJURY	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
INTERNAL ORGANS				
SURGERY IS REQUIRED	0.5	0.7	0.0	0.5
OTHER	0.8	1.1	1.1	0.8
SHOULDER				
SOFT TISSUE	14.9	12.3	9.9	14.7
FRACTURE	0.9	0.5	4.4	0.9
LACERATION	0.3	0.2	1.1	0.3
OTHER	0.9	1.1	2.2	1.0
ARM AND HAND				
FRACTURE	0.9	1.3	4.4	1.0
LOSS OF ARM OR HAND	0.0	0.0	0.0	0.0
LOSS OF BOTH ARMS OR HANDS	0.0	0.0	0.0	0.0
LACERATION	1.5	1.6	3.3	1.5
LOSS OF FINGERS	0.0	0.0	0.0	0.0
OTHER	5.2	6.3	2.2	5.2
ELBOW				
FRACTURE	0.1	0.0	0.0	0.1
OTHER	2.3	3.1	2.2	2.3
WRIST				
FRACTURE	0.7	1.4	0.0	0.8
OTHER	1.7	0.7	6.6	1.7
PELVIS AND HIP				
FRACTURE	1.1	1.1	3.3	1.1
OTHER	2.5	2.3	4.4	2.5
LEG AND FOOT				
FRACTURE	2.0	3.2	22.0	2.3
LOSS OF LEG OR FOOT	0.0	0.0	0.0	0.0
LACERATION	1.5	0.9	7.7	1.5
LOSS OF BOTH LEGS OR FEET	0.0	0.0	0.0	0.0
OTHER	4.2	5.2	9.9	4.3
KNEE				
SOFT TISSUE	7.7	5.9	12.1	7.6
FRACTURE	0.6	0.5	0.0	0.6
OTHER	2.5	3.2	13.2	2.7
FRACTURE	0.6	1.4	5.5	0.7
OTHER	1.8	2.0	3.3	1.8

QUESTION 25

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1333	537	89	1959

EMPLOYMENT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
EMPLOYED	64.7	62.9	59.6	64.5
HOMEMAKER	8.6	9.5	2.2	8.6
STUDENT	10.4	10.4	20.2	10.5
RETIRED	3.8	3.0	0.0	3.7
UNEMPLOYED	6.0	6.3	11.2	6.1
EMPLOYED PARTTIME	4.7	4.8	5.6	4.7
PRESCHOOLER	1.1	0.7	0.0	1.1
OTHER	0.8	2.2	1.1	0.9

QUESTION 26

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1333	537	89	1959
NUMBER USEABLE	991	396	58	1445

TYPE OF EMPLOYMENT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
SELF EMPLOYED	12.6	11.9	10.3	12.5
MANAGERIAL/PROFESSIONAL	20.1	18.9	10.3	19.9
CLERICAL	17.3	18.7	12.1	17.3
MANUAL	50.1	50.5	67.2	50.3

QUESTION 27

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	991	396	58	1445
NUMBER USEABLE	702	284	48	1034

GROSS WEEKLY EMPLOYMENT INCOME	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
LESS THAN $200	17.0	15.8	29.2	17.0
$201 TO $300	22.9	20.1	22.9	22.7
$301 TO $400	19.4	19.4	16.7	19.3
$401 TO $500	15.1	20.1	18.8	15.5
$501 TO $600	8.0	9.2	0.0	8.0
$601 TO $700	6.6	4.9	4.2	6.4
$701 TO $800	4.8	4.9	2.1	4.8
$801 TO $900	1.4	2.1	2.1	1.5
$901 TO $1000	2.0	1.4	2.1	2.0
MORE THAN $1000	2.8	2.1	2.1	2.8
AVERAGE $	426.96	439.75	372.88	427.31

QUESTION 28

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	668	310	55	1033

ACTUAL TIME LOSS	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
1 WEEK	22.5	16.5	5.5	21.9
2 WEEKS	12.0	10.0	7.3	11.8
3 WEEKS	6.7	6.8	1.8	6.7
4 WEEKS	3.9	5.8	7.3	4.1
2 MONTHS	15.0	11.6	10.9	14.7
3 MONTHS	10.8	8.1	18.2	10.7
4 MONTHS	6.4	6.8	3.6	6.4
5 MONTHS	4.8	3.2	1.8	4.7
6 MONTHS	2.7	2.3	0.0	2.6
7 MONTHS	2.7	2.9	7.3	2.8
8 MONTHS	0.9	2.9	0.0	1.0
9 MONTHS	0.9	2.9	1.8	1.0
10 MONTHS	2.1	1.3	3.6	2.1
11 MONTHS	0.4	0.3	3.6	0.5
12 MONTHS	0.3	0.6	3.6	0.4
2 YEARS	4.2	12.3	12.7	4.8
3 YEARS	1.3	2.3	5.5	1.5
4 YEARS	0.4	0.6	3.6	0.5
5 YEARS	0.3	1.3	1.8	0.4
PERMANENT	1.6	1.6	0.0	1.6
AVERAGE LOSS (IN WEEKS) perm=5yrs	18.6	28.8	37.1	19.5
AVERAGE LOSS (IN WEEKS) perm=20yrs	31.4	41.4	37.1	32.2
MEDIAN LOSS (IN WEEKS) excluding permanent	5.0	7.0	12.0	5.2

Note 1: In calculating average, "perm=5yrs" means permanent disabilities are considered to be a 5yr loss.
Note 2: In calculating average, "perm=20yrs" means permanent disabilities are considered to be a 20yr loss.

QUESTION 29

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1353	539	87	1979

TOTAL PAYMENT	PRIVATE PASSENGER		COMMERCIAL		MOTORCYCLE		WEIGHTED	
	%$	%claimants	%$	%claimants	%$	%claimants	%$	%claimants
LESS THAN $1,000	1.5	28.5	0.6	17.8	0.8	31.0	1.4	27.7
$1,001 TO $2,000	2.1	12.7	1.5	14.5	0.8	9.2	2.0	12.8
$2,001 TO $3,000	2.8	10.7	1.6	8.3	0.8	5.7	2.7	10.5
$3,001 TO $4,000	2.4	6.4	2.5	9.5	0.9	4.6	2.3	6.6
$4,001 TO $5,000	2.7	5.7	1.7	5.2	0.0	0.0	2.6	5.6
$5,001 TO $6,000	2.9	5.0	1.6	4.1	1.4	4.6	2.8	4.9
$6,001 TO $7,000	2.8	4.1	2.3	4.8	0.4	1.1	2.7	4.1
$7,001 TO $8,000	1.6	2.0	2.4	4.3	0.5	1.1	1.6	2.1
$8,001 TO $9,000	2.3	2.6	1.9	3.0	1.1	2.3	2.2	2.6
$9,001 TO $10,000	2.6	2.6	2.0	2.8	2.5	4.6	2.6	2.6
$10,001 TO $15,000	10.5	8.1	6.8	7.6	5.6	8.0	10.1	8.1
$15,001 TO $20,000	6.8	3.7	4.7	3.7	3.3	3.4	6.7	3.7
$20,001 TO $25,000	3.3	1.4	5.3	3.3	4.4	3.4	3.4	1.6
$25,001 TO $50,000	15.7	4.1	16.0	5.9	23.8	12.6	15.8	4.3
$50,001 TO $75,000	6.0	0.9	9.4	2.0	11.1	3.4	6.3	1.0
$75,001 TO $100,000	5.9	0.7	5.8	0.9	11.9	2.3	5.9	0.7
$100,001 TO $200,000	8.0	0.5	19.6	1.7	9.0	1.1	8.8	0.6
$200,001 TO $300,000	5.7	0.2	3.1	0.2	0.0	0.0	5.4	0.2
$300,001 TO $400,000	8.6	0.2	4.2	0.2	21.6	1.1	8.4	0.2
$400,001 TO $500,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MORE THAN $500,000	5.9	0.1	7.0	0.2	0.0	0.0	6.0	0.1

Note1 : "%$" means percentage of total dollars paid to claimants in each band.
Note2 : "%claimants" means percentage of claimants in each band.

QUESTION 30

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

BREAKDOWN OF SETTLEMENT/AWARD	PRIVATE PASSENGER % total $	COMMERCIAL % total $	MOTORCYCLE % total $	WEIGHTED % total $
LOSS OF EMPLOYMENT INCOME	13.5	11.3	10.8	13.3
OTHER SPECIAL DAMAGES	2.5	2.8	1.1	2.5
NON-PECUNIARY	45.9	41.3	46.0	45.6
FLRA/FLA	4.8	13.3	3.6	5.4
FUTURE EMPLOYMENT INCOME	10.3	7.6	14.1	10.1
FUTURE CARE	1.4	2.5	0.0	1.4
GROSS-UP FOR TAX	0.4	0.6	0.0	0.4
FUND MANAGEMENT	0.0	0.0	0.0	0.0
PARTY AND PARTY COSTS	11.0	10.8	11.0	11.0
PREJUDGEMENT INTEREST	10.2	9.9	13.4	10.2

Note1 : "% total $" means percentage of total B.I. dollars.

BREAKDOWN OF SETTLEMENT/AWARD	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
LOSS OF EMPLOYMENT INCOME	38.4	38.6	41.8	38.4
OTHER SPECIAL DAMAGES	22.4	30.5	31.9	23.0
NON-PECUNIARY	94.6	93.5	86.8	94.5
FLRA/FLA	8.3	11.7	16.5	8.6
FUTURE EMPLOYMENT INCOME	2.2	2.9	5.5	2.2
FUTURE CARE	0.2	0.7	0.0	0.2
GROSS-UP FOR TAX	0.1	0.2	0.0	0.1
FUND MANAGEMENT	0.0	0.0	0.0	0.0
PARTY AND PARTY COSTS	53.8	62.3	50.5	54.4
PREJUDGEMENT INTEREST	37.2	42.7	40.7	37.6

Note1 : "%claimants" means percentage of total claimants receiving each head of damages.

QUESTION 31

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

FLRA/FLA CLAIMS	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
SPOUSE	1.5	7.0	0.3	1.9
CHILDREN	0.8	3.7	0.4	1.0
OTHERS	2.5	2.6	2.9	2.5

QUESTION 32

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

BREAKDOWN OF INTERNAL EXPENSES	PRIVATE PASSENGER % total $	COMMERCIAL % total $	MOTORCYCLE % total $	WEIGHTED % total $
FEES PAID TO INSURER'S LAWYER	6.0	8.4	7.4	6.2
FEES ALLOCATED TO IN-HOUSE LAWYER	0.2	0.1	0.0	0.2
COST OF INDEPENDANT ADJUSTER	2.0	1.7	1.3	2.0
COST OF DEFENCE MEDICAL	0.2	0.2	0.3	0.2
COST OF OTHER EXPERTS	0.7	0.7	0.3	0.7
OTHER	0.4	1.1	0.3	0.5

Note1 : "% total $" means percentage of total B.I. dollars.

QUESTION 36

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

TIME TILL MEDICAL REPORT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
WITHIN ONE MONTH	7.7	9.0	14.3	7.9
1 TO 2 MONTHS	6.5	7.0	4.4	6.5
2 TO 3 MONTHS	7.4	3.1	8.8	7.1
3 TO 4 MONTHS	5.2	6.3	5.5	5.2
4 TO 5 MONTHS	4.0	4.7	5.5	4.1
5 TO 6 MONTHS	3.8	3.6	6.6	3.8
6 TO 9 MONTHS	9.1	11.9	5.5	9.3
9 TO 12 MONTHS	7.5	9.4	2.2	7.5
12 TO 24 MONTHS	14.7	15.7	16.5	14.8
24 TO 36 MONTHS	4.2	5.4	5.5	4.3
36 TO 48 MONTHS	0.5	0.9	0.0	0.5
48 TO 60 MONTHS	0.1	0.4	1.1	0.1
MORE THAN 60 MONTHS	0.1	0.0	0.0	0.1
NONE RECEIVED	29.3	22.7	24.2	28.8
MEDIAN LOSS (IN WEEKS) excluding permanent	7.0	8.0	5.0	7.1

QUESTION 37

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1394	555	91	2040

ADDITIONAL INFORMATION	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
REPRESENTED BY COUNSEL	53.9	67.6	52.7	54.8
ACTION COMMENCED	23.3	33.3	35.2	24.1
EXAMINATION FOR DISCOVERY	12.3	18.7	19.8	12.8
CASE PRE-TRIED	4.2	7.6	9.9	4.5
CASE TRIED BY JURY	0.2	0.2	1.1	0.2
CASE APPEALED	0.1	0.2	0.0	0.1
APPEALED BY PLAINTIFF	0.0	0.2	0.0	0.0

Note1: "% claimants" does not add to 100% as the events are not independant.

QUESTION 38

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1394	555	91	2040
NUMBER USEABLE	1385	539	90	2014

SETTLEMENT CONCLUDED	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
BEFORE ACTION COMMENCED	76.8	66.8	64.4	76.0
BEFORE DISCOVERY EXAMINATION	10.7	14.8	14.4	11.0
BEFORE PRE-TRIAL	8.2	10.9	10.0	8.4
WITHIN 10 DAYS OF/AT PRE-TRIAL	0.7	2.6	3.3	0.9
BEFORE ACTION CALLED FOR TRIAL	3.0	4.3	5.6	3.1
AT TRIAL	0.6	0.6	2.2	0.6

YELLOW FORM

General Instructions

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1. Indicate company number, your initials and claim number clearly for future reference.

2. This survey form is to be completed for each claimant. For example, if an accident gives rise to three claimants, three separate forms have to be completed.

3. All dollar figures are in whole dollars. Absolutely no cent should be shown.

4. All dollar figures which should balance to the answers of other questions will be checked.

5. All dates are in international convention. They are shown as year, month and day.

6. Do not leave date blank. Use UN for unknown only if the information is unavailable.

7. Where a dollar amount is expected, a blank will imply 0. If there is no information to make an estimate, use UN for unknown.

8. Where a check mark "X" or a selection "a number" is expected, you MUST pick the most appropriate category. Otherwise, the form will be returned.

10 March 1987

MOTOR VEHICLE ACCIDENT BENEFIT CLAIM SURVEY

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[1] Company number |_|_|_|

[2] Your initials |_|_|_|

[3] Claim number |_|_|_|_|_|_|_|_|_|_|_|_|_|

[4] Claimant number |_|_|

[5] Coverage (check one box) |_| A.B. |_| uninsured motorist

[6] Policy limit (section A) |_|_|_|_|0|0|0|

[7] Claimant category |_|

1: driver
2: spouse of driver
3: dependent child
4: other passenger in insured's vehicle
5: pedestrian
6: other

[8] Sex of claimant |_| 1: male 2: female

[9] Age of claimant |_|_| as of the date of accident

[10] Accident type |_| 1: single vehicle 2: multiple vehicle

[11] Vehicle type |_| insured's vehicle |_| claimant's vehicle
1: car 2: truck/van 3: motorcycle 4: bus 5: snow vehicle 6: ATV

[12] Degree of fault (based on your assessment): your insured |_|_|_| %
claimant |_|_|_| % The two figures need not add up to 100%.

[13] IBC statistical territory code ¦7 ¦ ¦ ¦ of your insured vehicle.

[14] Place of accident (check one box) ☐ Ontario ☐ Quebec
☐ other jurisdictions in Canada ☐ U.S.A.

[15] IBC class code ¦ ¦ ¦

[16] Date of accident YY ¦1 ¦9 ¦ ¦ ¦ MM ¦ ¦ ¦ DD ¦ ¦ ¦

[17] Date when an accident benefit payment or reserve was set up (whichever is earlier) YY ¦1 ¦9 ¦ ¦ ¦ MM ¦ ¦ ¦ DD ¦ ¦ ¦

[18] Date of first payment to claimant
YY ¦1 ¦9 ¦ ¦ ¦ MM ¦ ¦ ¦ DD ¦ ¦ ¦

[19] Amount of first payment to claimant $ ¦ ¦ ¦ ¦ ¦ ¦ ¦

Answer questions 20 and 21 if the claim is uninsured motorist coverage or the accident benefit claim is in dispute or litigation.

[20] First verbal offer to settle was made by ☐ claimant/representative
☐ your company ☐ neither party (i.e. no verbal offer was made)
Date of first verbal offer to settle
YY ¦1 ¦9 ¦ ¦ ¦ MM ¦ ¦ ¦ DD ¦ ¦ ¦

[21] First written offer to settle was made by ☐ claimant/representative
☐ your company ☐ neither party (i.e. no written offer was made)
Date of the first written offer to settle
YY ¦1 ¦9 ¦ ¦ ¦ MM ¦ ¦ ¦ DD ¦ ¦ ¦

[22] Date of settlement (i.e. last payment to claimant)

YY |1|9|_|_| MM |_|_| DD |_|_|

If claim is still outstanding, ☐ check here.

[23] Condition of claimant ☐ 1: deceased 2: injured

[24] Type of injury (Check more than one if necessary)

INSTRUCTION: first check the part(s) of the body injured, then check the type(s) of injury corresponding to the part of the body.

Part of Body	Description of Injury
☐ 99 none	☐ nominal value (shaken up) ☐ psychological trauma
☐ 0 brain or spinal column	☐ paraplegic or quadraplegic or vegetative state ☐ other
☐ 1 head	☐ fracture ☐ concussion
☐ 2 face	☐ fracture ☐ laceration with scar ☐ laceration - no scar
☐ 3 eye	☐ partial loss or loss of use of 1 or 2 eyes ☐ total loss or loss of use of 1 or 2 eyes
☐ 4 ears	☐ partial loss or loss of use of 1 or 2 ears ☐ total loss or loss of use of 1 or 2 ears
☐ 5 nose	☐ resulting in disfigurement ☐ no disfigurement
☐ 6 teeth and jaw	☐ fracture ☐ loss of teeth ☐ other
☐ 7 voice and larynx	☐ loss of voice ☐ other

☐ 8 neck	☐ soft tissue ☐ vertebrae/disc fracture ☐ psychological trauma
☐ 9 back	☐ soft tissue ☐ vertebrae/disc fracture ☐ psychological trauma

Part of Body	Description of Injury
☐ 10 chest and ribs	☐ fracture ☐ other
☐ 11 internal organs	☐ surgery is required ☐ other
☐ 12 shoulder	☐ soft tissue ☐ fracture ☐ laceration ☐ other
☐ 13 arm and hand	☐ fracture ☐ loss of arm or hand ☐ loss of both arms or hands ☐ laceration ☐ loss of fingers ☐ other
☐ 14 elbow	☐ fracture ☐ other
☐ 15 wrist	☐ fracture ☐ other
☐ 16 pelvis and hip	☐ fracture ☐ other
☐ 17 leg and foot	☐ fracture ☐ loss of leg or foot ☐ laceration ☐ loss of both legs or feet ☐ other
☐ 18 knee	☐ soft tissue ☐ fracture ☐ other
☐ 19 ankle	☐ fracture ☐ other

[25] Employment |_|
1: employed
2: homemaker
3: student
4: retired
5: unemployed
6: employed part-time
7: preschooler
8: other

[26] Type of employment |_|
1: self-employed
2: managerial/professional
3: clerical
4: manual

[27] Gross employment income (weekly) $ |_|_|_|_|_|

[28] Amount of actual time loss |_| Yrs. |_|_| Mos. |_|_| Weeks including intermittent time off. Use your best estimate here, do not leave it blank.

[29] Total gross amount of payment to claimant and oustanding reserve (including uninsured motorist coverage) $ |_|_|_|_|_|_|_| This amount must equal to the sum of question 30 and 34.

<table>
<tr><th>[30] Section B benefits</th><th>Payments</th><th>Reserve</th></tr>
<tr><td>medical</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>rehabilitation</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>disability</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>housewife disability benefit</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>funeral</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>death</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>Quebec Part III</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
<tr><td>total</td><td>$ |_|_|_|_|_|_|_|</td><td>$ |_|_|_|_|_|_|_|</td></tr>
</table>

[31] Employer salary continuance programs |_| unknown
Sick leave with pay |_|_|_| % salary , $ |_|_|_|_|_|_|_|
Short term disability |_|_|_| % salary , $ |_|_|_|_|_|_|_|
Long term disability |_|_|_| % salary , $ |_|_|_|_|_|_|_|

[32]	Government programs ☐ unknown	
	U.I.C.	$ ________
	C.P.P.	$ ________
	Workers' Compensation	$ ________
	Other	$ ________

[33] Additional information (check yes or no):

		YES	NO
(a)	Was claimant represented by counsel?	☐	☐
(b)	Was action commenced?	☐	☐
(c)	Was there examination for discovery?	☐	☐
(d)	Was case pre-tried?	☐	☐
(e)	Was case tried by jury?	☐	☐
(f)	Was there an appeal?	☐	☐
(g)	If appealed, was case appealed by plaintiff?	☐	☐
(h)	Was claim settled by arbitration?	☐	☐

Answer the rest of the questions only when there are B.I. uninsured motorist payments or reserve.

[34] Total gross amount of payment to claimant and reserve, including costs, disbursements and prejudgement interest $ ________ This amount MUST equal to the sum of 35 (a), (b), (c) and (d).

[35] Settlement, or breakdown of award if case tried:

(a) Special damages (net of Section B):

	Payments	Reserve
loss of employment income to trial or settlement	$ ________	$ ________
other income loss	$ ________	$ ________
medical and hospital (above OHIP)	$ ________	$ ________

funeral expense	$ ________	$ ________
other	$ ________	$ ________
sub-total	$ ________	$ ________

(b) General damages (net of Section B if applicable):

	Payments	Reserve
non-pecuniary	$ ________	$ ________
FLRA/FLA [must equal 36 (a) + (b) +(c)]	$ ________	$ ________
future employment income	$ ________	$ ________
future care	$ ________	$ ________
gross-up for tax	$ ________	$ ________
fund management	$ ________	$ ________
sub-total	$ ________	$ ________

(c) Party to party costs including disbursements	$ ________	$ ________
(d) Prejudgement interest	$ ________	$ ________

☐ stated in settlement
☐ estimated

[36] Family Law Reform Act/Family Law Act claims:

(a) Spouse:

	Payments	Reserve
Amount paid	$ ________	$ ________

(b) Children:

Number of claimants		____
Number of claimants paid		____
Amount paid	$ ________	$ ________

(c) Other relatives and others:

Number of claimants |_|_|

Number of claimants paid |_|_|

Amount paid $ |_|_|_|_|_|_| $ |_|_|_|_|_|_|

[37] Breakdown of internal expenses (exclude staff adjuster):

(a) Fees paid to insurer's lawyer $ |_|_|_|_|_|_|_|

(b) Fees allocated to in-house lawyer $ |_|_|_|_|_|_|_|

(c) Cost of independent adjuster $ |_|_|_|_|_|_|_|

(d) Cost of defence medical $ |_|_|_|_|_|_|_|

(e) Cost of other experts $ |_|_|_|_|_|_|_|

(f) Other $ |_|_|_|_|_|_|_|

[38] If claim settled, indicate when settlement was concluded (check only ONE):

(a) before action commenced ☐

(b) after action commenced but before examination for discovery ☐

(c) after examination for discovery but before pre-trial ☐

(d) at pre-trial or as an immediate consequence of pre-trial ☐

(e) between pre-trial and date action called for trial ☐

(f) at trial ☐

[39] Did gross value of claim exceed policy limit? ☐ Yes ☐ No

If yes, what was the gross value $ |_|_|_|_|0|0|0|

[40] Was the claim a structured settlement? ☐ Yes ☐ No

If yes, answer the following:

(a) gross amount of claim [from question 34] $ |_|_|_|_|_|_|_|

(b) interim payments $ |_|_|_|_|_|_|_|

(c) party to party costs [from 35 (c)] $ |_|_|_|_|_|_|_|

(d) cost of annuity [must equal
40 (a) - (b) - (c)] $ |_|_|_|_|_|_|_|

(e) brokerage fee or other fee (if known) $ |_|_|_|_|_|_|_|

SUMMARY ANALYSIS OF MOTOR VEHICLE A.B. CLAIM SURVEY (YELLOW FORM)

QUESTION 6

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	890	338	191	1419
NUMBER USEABLE	884	337	191	1412

POLICY LIMIT OF INSURED	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
UP TO $200,000	5.4	6.8	28.8	5.8
$300,000	4.5	2.7	1.6	4.4
$500,000	43.7	38.0	55.5	43.4
$1,000,000	43.6	46.3	13.6	43.4
OVER $1,000,000	2.8	6.2	0.5	3.0

QUESTION 7

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1138	406	210	1754

CLAIMANT CATEGORY	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
DRIVER	61.4	60.6	83.8	61.6
SPOUSE OF DRIVER	8.6	5.7	1.4	8.3
DEPENDENT CHILD	1.8	0.7	0.5	1.7
PASSENGER (NOT NAMED INSURED)	21.2	20.9	10.5	21.1
PEDESTRIAN	5.6	11.1	2.4	6.0
OTHER	1.4	1.0	1.4	1.4

QUESTION 8

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1137	404	210	1751

SEX OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
MALE	47.8	65.6	87.1	49.5
FEMALE	52.2	34.4	12.9	50.5

QUESTION 9

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1138	406	210	1754

AGE OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
LESS THAN 16 YRS	7.2	4.7	6.7	7.0
16 TO 18 YRS	6.0	5.9	9.5	6.0
19 TO 20 YRS	6.7	7.6	15.2	6.8
21 TO 22 YRS	8.1	6.9	13.3	8.1
23 TO 24 YRS	8.7	4.7	13.8	8.5
25 TO 29 YRS	14.9	13.8	12.4	14.8
30 TO 34 YRS	9.1	15.8	11.4	9.5
35 TO 39 YRS	9.8	8.9	7.1	9.7
40 TO 44 YRS	6.3	8.1	3.3	6.4
45 TO 49 YRS	6.3	5.4	2.9	6.2
50 TO 54 YRS	4.5	7.4	1.9	4.7
55 TO 59 YRS	4.2	4.2	1.4	4.2
60 TO 64 YRS	4.0	3.7	1.0	4.0
65 TO 69 YRS	1.6	1.5	0.0	1.6
MORE THAN 69 YRS	2.5	1.5	0.0	2.4

QUESTION 10

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	890	338	191	1419
NUMBER USEABLE	890	338	191	1419

TYPE OF ACCIDENT	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
SINGLE VEHICLE	19.6	25.7	40.8	20.2
MULTI VEHICLE	80.4	74.3	59.2	79.8

QUESTION 11

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	890	338	191	1419
NUMBER USEABLE	821	109	180	1110

ACCIDENT VEHICLES	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
INSURED OTHER				
CAR - SINGLE VEHICLE	29.2	0.0	0.0	26.9
CAR - CAR	61.0	0.0	0.0	56.1
CAR - TRUCK	9.0	0.0	0.0	8.3
CAR - MOTORCYCLE	0.1	0.0	0.0	0.1
CAR - OTHER	0.6	0.0	0.0	0.6
INSURED OTHER				
TRUCK - SINGLE VEHICLE	0.0	48.6	0.0	3.4
TRUCK - CAR	0.0	39.4	0.0	2.8
TRUCK - MOTORCYCLE	0.0	11.0	0.0	0.8
TRUCK - TRUCK	0.0	0.0	0.0	0.0
TRUCK - OTHER	0.0	0.9	0.0	0.1
INSURED OTHER				
MOTORCYCLE - SINGLE VEHICLE	0.0	0.0	42.8	0.4
MOTORCYCLE - CAR	0.0	0.0	36.1	0.4
MOTORCYCLE - TRUCK	0.0	0.0	7.8	0.1
MOTORCYCLE - MOTORCYCLE	0.0	0.0	13.3	0.1
MOTORCYCLE - OTHER	0.0	0.0	0.0	0.0

QUESTION 12

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1138	406	210	1754

DEGREE OF FAULT OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
NONE	77.7	75.1	49.5	77.2
LESS THAN 100%	5.0	7.1	5.2	5.2
100%	17.3	17.7	45.2	17.6

QUESTION 13

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	890	338	191	1419
NUMBER USEABLE	886	338	190	1414

IBC STATISTICAL TERRITORY	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
METRO TORONTO	39.4	33.1	7.9	38.6
URBAN (NOT TORONTO)	32.1	32.2	47.9	32.2
RURAL	28.6	34.6	44.2	29.1

QUESTION 14

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	890	338	191	1419
NUMBER USEABLE	890	338	191	1419

PLACE OF ACCIDENT	PRIVATE PASSENGER %accidents	COMMERCIAL %accidents	MOTORCYCLE %accidents	WEIGHTED %accidents
ONTARIO	97.9	98.2	96.9	97.9
QUEBEC	0.8	0.6	0.5	0.8
OTHER PROVINCES	0.0	0.6	0.5	0.0
USA	1.3	0.6	2.1	1.3

QUESTION 18

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1069	385	205	1659

TIME TILL FIRST PAYMENT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
WITHIN ONE MONTH	34.5	36.6	48.8	34.8
1 TO 2 MONTHS	22.7	26.0	20.0	22.9
2 TO 3 MONTHS	12.3	10.9	6.8	12.2
3 TO 4 MONTHS	7.2	8.1	6.3	7.3
4 TO 5 MONTHS	5.1	4.2	3.9	5.1
5 TO 6 MONTHS	4.5	2.9	3.4	4.4
6 TO 9 MONTHS	6.3	3.6	5.4	6.1
9 TO 12 MONTHS	3.6	4.4	2.4	3.7
12 TO 24 MONTHS	3.6	3.4	2.9	3.6
24 TO 36 MONTHS	0.0	0.0	0.0	0.0
36 TO 48 MONTHS	0.0	0.0	0.0	0.0
48 TO 60 MONTHS	0.0	0.0	0.0	0.0
MORE THAN 60 MONTHS	0.0	0.0	0.0	0.0
MEDIAN (IN MONTHS)	4.0	4.0	3.0	4.0

QUESTION 22

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	943	355	200	1498

TIME TILL LAST PAYMENT TO CLAIMANT	PRIVATE PASSENGER %claiments	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
WITHIN ONE MONTH	16.9	16.1	24.5	16.9
1 TO 2 MONTHS	15.9	16.6	14.5	15.9
2 TO 3 MONTHS	10.4	11.5	12.5	10.5
3 TO 4 MONTHS	7.7	11.3	11.0	8.0
4 TO 5 MONTHS	7.4	6.8	6.5	7.4
5 TO 6 MONTHS	6.4	5.1	5.0	6.3
6 TO 9 MONTHS	12.9	11.3	8.5	12.8
9 TO 12 MONTHS	8.2	9.9	9.5	8.3
12 TO 24 MONTHS	14.0	11.3	8.0	13.7
24 TO 36 MONTHS	0.2	0.3	0.0	0.2
36 TO 48 MONTHS	0.0	0.0	0.0	0.0
48 TO 60 MONTHS	0.0	0.0	0.0	0.0
MORE THAN 60 MONTHS	0.0	0.0	0.0	0.0
MEDIAN (IN MONTHS)	4.0	4.0	3.0	4.0

QUESTION 23

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1138	406	210	1754

CONDITION OF CLAIMANT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
DECEASED	1.3	4.2	7.6	1.6
INJURED	98.7	95.8	92.4	98.4

QUESTION 24

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1138	406	210	1754

TYPE OF INJURY	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
NONE				
NOMINAL VALUE (SHAKEN UP)	8.1	6.2	5.2	7.9
PSYCHOLOGICAL TRAUMA	0.5	0.2	0.0	0.5
BRAIN OR SPINAL COLUMN				
PARAPLEGIC, QUADRAPLEGIC OR VEGETATIVE STATE	0.2	0.2	0.0	0.2
OTHER	1.1	0.5	1.4	1.0
HEAD				
FRACTURE	0.8	1.2	0.5	0.8
CONCUSSION	7.1	7.4	2.9	7.1
FACE				
FRACTURE	0.7	0.5	0.5	0.7
LACERATION WITH SCAR	2.3	3.0	1.9	2.3
LACERATION - NO SCAR	4.4	4.2	3.8	4.4
EYES				
PARTIAL LOSS OR LOSS OF USE OF 1 OR 2 EYES	0.1	0.2	0.5	0.1
TOTAL LOSS OR LOSS OF USE OF 1 OR 2 EYES	0.1	0.0	0.0	0.1
EARS				
PARTIAL LOSS OR LOSS OF USE OF 1 OR 2 EARS	0.1	0.0	0.0	0.1
TOTAL LOSS OR LOSS OF USE OF 1 OR 2 EARS	0.0	0.2	0.0	0.0
NOSE				
RESULTING IN DISFIGUREMENT	0.2	0.0	0.0	0.2
NO DISFIGUREMENT	1.5	2.5	0.5	1.6
TEETH AND JAW				
FRACTURE	0.8	0.5	1.4	0.8
LOSS OF TEETH	0.7	1.7	0.5	0.8
OTHER	2.8	2.0	2.4	2.7
VOICE AND LARYNX				
LOSS OF VOICE	0.0	0.0	0.0	0.0
OTHER	0.1	0.2	0.0	0.1
NECK				
SOFT TISSUE	57.9	50.7	5.7	56.9
VERTABRAE/DISC FRACTURE	0.2	0.5	1.0	0.2
PSYCHOLOGICAL TRAUMA	1.8	1.2	0.0	1.7
BACK				
SOFT TISSUE	39.1	31.5	11.0	38.3
VERTABRAE/DISC FRACTURE	1.1	0.7	3.3	1.1
PSYCHOLOGICAL TRAUMA	1.1	1.0	0.0	1.0
CHEST AND RIBS				
FRACTURE	3.3	3.2	4.3	3.3
OTHER	5.5	8.4	3.8	5.7

QUESTION 24 continued

TYPE OF INJURY	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
INTERNAL ORGANS				
SURGERY IS REQUIRED	0.9	1.0	0.5	0.9
OTHER	1.3	1.2	2.9	1.3
SHOULDER				
SOFT TISSUE	10.5	9.1	6.2	10.3
FRACTURE	1.5	2.0	6.2	1.6
LACERATION	0.2	0.2	0.5	0.2
OTHER	0.7	1.0	1.4	0.7
ARM AND HAND				
FRACTURE	1.7	0.7	9.0	1.7
LOSS OF ARM OR HAND	0.0	0.0	0.0	0.0
LOSS OF BOTH ARMS OR HANDS	0.0	0.0	0.0	0.0
LACERATION	1.9	2.5	6.7	2.0
LOSS OF FINGERS	0.0	0.2	0.0	0.0
OTHER	3.5	4.9	3.8	3.6
ELBOW				
FRACTURE	0.4	0.2	1.4	0.4
OTHER	2.0	2.2	6.2	2.1
WRIST				
FRACTURE	0.4	1.0	6.7	0.5
OTHER	1.1	1.5	2.4	1.1
PELVIS AND HIP				
FRACTURE	1.8	2.7	3.3	1.9
OTHER	2.3	2.5	5.2	2.3
LEG AND FOOT				
FRACTURE	3.0	4.9	10.5	3.2
LOSS OF LEG OR FOOT	0.0	0.0	0.5	0.0
LACERATION	1.1	3.0	7.6	1.3
LOSS OF BOTH LEGS OR FEET	0.0	0.0	0.0	0.0
OTHER	4.5	6.7	10.5	4.7
KNEE				
SOFT TISSUE	6.0	6.7	9.0	6.1
FRACTURE	0.3	1.0	2.9	0.3
OTHER	1.4	1.7	8.1	1.5
ANKLE				
FRACTURE	0.7	0.2	1.4	0.7
OTHER	1.3	3.0	9.0	1.5

QUESTION 25

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1078	384	200	1662

EMPLOYMENT	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
EMPLOYED	72.2	77.3	75.5	72.6
HOMEMAKER	7.8	6.3	1.0	7.6
STUDENT	6.3	6.0	6.0	6.3
RETIRED	3.5	1.3	1.5	3.3
UNEMPLOYED	4.7	3.1	5.5	4.6
EMPLOYED PARTTIME	4.7	5.2	8.5	4.8
PRESCHOOLER	0.3	0.3	0.5	0.3
OTHER	0.5	0.5	1.5	0.5

QUESTION 26

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1078	384	200	1662
NUMBER USEABLE	913	338	181	1432

EMPLOYMENT TYPE	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
SELF EMPLOYED	11.3	19.2	6.6	11.8
MANAGERIAL/PROFESSIONAL	13.6	8.6	5.5	13.2
CLERICAL	19.1	13.3	4.4	18.5
MANUAL	56.1	58.9	83.4	56.5

QUESTION 27

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	913	338	181	1432
NUMBER USEABLE	734	295	159	1188

GROSS WEEKLY EMPLOYMENT INCOME	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
LESS THAN $200	23.4	21.0	19.5	23.2
$201 TO $300	23.2	19.7	22.0	22.9
$301 TO $400	19.1	18.0	17.6	19.0
$401 TO $500	12.9	17.3	12.6	13.2
$501 TO $600	9.7	12.9	15.1	10.0
$601 TO $700	5.9	4.4	7.5	5.8
$701 TO $800	2.5	2.7	3.8	2.5
$801 TO $900	1.0	2.0	0.6	1.0
$901 TO $1000	0.7	0.7	0.0	0.7
MORE THAN $1000	1.8	1.4	1.3	1.7
AVERAGE $	373.22	394.72	387.58	374.87

QUESTION 28

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	786	308	163	1257

ACTUAL TIME LOSS	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
1 WEEK	17.3	13.0	15.3	17.0
2 WEEKS	14.4	11.7	15.3	14.2
3 WEEKS	4.7	6.8	4.3	4.9
4 WEEKS	7.3	6.8	6.1	7.2
2 MONTHS	12.1	12.0	16.0	12.1
3 MONTHS	10.4	14.3	13.5	10.7
4 MONTHS	5.3	8.1	11.0	5.6
5 MONTHS	6.0	5.2	2.5	5.9
6 MONTHS	5.0	3.2	1.2	4.8
7 MONTHS	3.1	3.9	2.5	3.1
8 MONTHS	2.3	1.9	1.2	2.3
9 MONTHS	1.4	1.6	2.5	1.4
10 MONTHS	1.1	1.3	1.8	1.2
11 MONTHS	1.3	1.6	0.0	1.3
12 MONTHS	0.3	1.0	0.0	0.3
2 YEARS	7.4	6.2	4.9	7.3
3 YEARS	0.8	1.0	1.2	0.8
4 YEARS	0.0	0.0	0.0	0.0
5 YEARS	0.0	0.0	0.0	0.0
PERMANENT	0.0	0.3	0.6	0.0
AVERAGE LOSS (IN WEEKS) perm=5yrs	15.6	16.4	15.3	15.6
AVERAGE LOSS (IN WEEKS) perm=20yrs	15.6	18.9	20.1	15.9
MEDIAN LOSS (IN WEEKS) excluding permanent	6.0	8.0	7.0	6.2

Note1: In calculating average, "perm=5yrs" means permanent disabilities are considered to be a 5 year loss.
Note2: In calculating average "perm=20yrs" means permanent disabilities are considered to be a 20 year loss.

QUESTION 29

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1136	402	209	1747

TOTAL PAYMENT	PRIVATE PASSENGER		COMMERCIAL		MOTORCYCLE		WEIGHTED	
	%$	%claimants	%$	%claimants	%$	%claimants	%$	%claimants
LESS THAN $1,000	6.8	60.3	7.2	60.2	8.0	57.4	6.8	60.3
$1,001 TO $2,000	7.6	13.7	6.9	13.9	10.2	17.2	7.5	13.8
$2,001 TO $3,000	7.4	7.7	5.0	5.7	9.5	9.6	7.3	7.5
$3,001 TO $4,000	5.6	4.1	5.9	4.7	3.3	2.4	5.6	4.2
$4,001 TO $5,000	4.0	2.3	5.8	3.7	3.5	1.9	4.1	2.4
$5,001 TO $6,000	4.9	2.3	6.3	3.2	2.2	1.0	5.0	2.3
$6,001 TO $7,000	2.7	1.1	2.3	1.0	2.6	1.0	2.7	1.1
$7,001 TO $8,000	3.0	1.1	1.9	0.7	0.0	0.0	2.9	1.0
$8,001 TO $9,000	2.9	0.9	0.0	0.0	1.7	0.5	2.7	0.8
$9,001 TO $10,000	3.9	1.1	1.7	0.5	3.9	1.0	3.8	1.0
$10,001 TO $15,000	13.4	2.9	15.6	3.5	24.0	4.8	13.6	3.0
$15,001 TO $20,000	8.4	1.2	6.4	1.0	9.8	1.4	8.3	1.2
$20,001 TO $25,000	3.0	0.4	0.0	0.0	4.0	0.5	2.8	0.3
$25,001 TO $50,000	7.3	0.6	13.3	1.2	17.3	1.4	7.8	0.7
$50,001 TO $75,000	6.6	0.3	5.4	0.2	0.0	0.0	6.4	0.3
$75,001 TO $100,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
$100,001 TO $200,000	4.1	0.1	16.4	0.2	0.0	0.0	4.9	0.1
$200,001 TO $300,000	8.4	0.1	0.0	0.0	0.0	0.0	7.7	0.1
$300,001 TO $400,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
$400,001 TO $500,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MORE THAN $500,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note1: "%$" means percentage of total dollars paid to claimants in each band.
Note2: "%claimants" means percentage of claimants in each band.

QUESTION 30

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1123	394	209	1726

SECTION B BENEFITS	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants	WEIGHTED AVERAGE $AMOUNT
MEDICAL	70.1	66.8	60.3	69.7	641
REHABILITATION	1.9	2.0	3.3	1.9	2,701
DISABILITY	63.6	69.3	70.3	64.0	2,089
HOUSEWIFE DISABILITY BENEFIT	2.8	3.0	0.5	2.8	606
FUNERAL	1.2	2.0	5.7	1.3	995
DEATH	1.0	1.5	3.3	1.0	9,497
QUEBEC PART III	0.4	0.8	0.5	0.5	18,834

QUESTION 31

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	413	170	95	678

EMPLOYER SALARY CONTINUANCE PROGRAMS	PRIVATE PASSENGER %wage loss	COMMERCIAL %wage loss	MOTORCYCLE %wage loss	WEIGHTED %wage loss
SICK LEAVE WITH PAY	39.9	11.6	85.1	38.4
SHORT TERM DISABILITY	13.2	19.4	18.1	13.7
LONG TERM DISABILITY	0.4	8.4	8.4	1.0

Note1: "%wage loss" means percentage of total dollars represented by the salary continuance program.

QUESTION 32

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	15	8	5	28

GOVERNMENT PROGRAMS	PRIVATE PASSENGER %wage loss	COMMERCIAL %wage loss	MOTORCYCLE %wage loss	WEIGHTED %wage loss
U.I.C.	38.2	32.4	54.8	38.0

Note1: "%wage loss" means percentage of total dollars represented by the government program.
Note2: CPP and Workers Compensation were not included in the analysis due to insufficient information.

QUESTION 33

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	1138	406	210	1754

ADDITIONAL INFORMATION	PRIVATE PASSENGER %claimants	COMMERCIAL %claimants	MOTORCYCLE %claimants	WEIGHTED %claimants
CLAIMANT REPRESENTED BY COUNSEL	38.3	39.9	23.8	38.3
ACTION COMMENCED	4.7	6.2	0.5	4.7
EXAMINATION FOR DISCOVERY	0.8	1.5	0.5	0.8
CASE PRE-TRIED	0.0	0.2	0.0	0.0
CASE TRIED BY JURY	0.0	0.0	0.0	0.0
CASE APPEALED	0.0	0.0	0.0	0.0
APPEALED BY PLAINTIFF	0.0	0.0	0.0	0.0
SETTLED BY ARBITRATION	0.1	0.0	0.0	0.1

QUESTION 34

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	37	12	3	52

TOTAL U.M. PAYMENT	PRIVATE PASSENGER		COMMERCIAL		MOTORCYCLE		WEIGHTED	
	%$	%claimants	%$	%claimants	%$	%claimants	%$	%claimants
LESS THAN $1,000	0.5	10.8	0.4	16.7	0.0	0.0	0.5	11.1
$1,001 TO $2,000	0.5	5.4	0.0	0.0	10.2	33.3	0.5	5.3
$2,001 TO $3,000	0.7	5.4	0.9	8.3	13.5	33.3	0.9	5.9
$3,001 TO $4,000	0.6	2.7	0.0	0.0	0.0	0.0	0.6	2.5
$4,001 TO $5,000	1.5	5.4	0.0	0.0	0.0	0.0	1.4	5.0
$5,001 TO $6,000	0.0	0.0	1.9	8.3	0.0	0.0	0.1	0.6
$6,001 TO $7,000	2.2	5.4	0.0	0.0	0.0	0.0	2.0	5.0
$7,001 TO $8,000	1.3	2.7	0.0	0.0	0.0	0.0	1.2	2.5
$8,001 TO $9,000	4.1	8.1	0.0	0.0	0.0	0.0	3.8	7.5
$9,001 TO $10,000	12.4	21.6	0.0	0.0	0.0	0.0	11.4	19.9
$10,001 TO $15,000	9.7	13.5	15.4	33.3	76.3	33.3	10.7	15.1
$15,001 TO $20,000	2.5	2.7	11.9	16.7	0.0	0.0	3.2	3.7
$20,001 TO $25,000	3.9	2.7	0.0	0.0	0.0	0.0	3.6	2.5
$25,001 TO $50,000	13.6	8.1	16.3	8.3	0.0	0.0	13.7	8.0
$50,001 TO $75,000	9.4	2.7	0.0	0.0	0.0	0.0	8.7	2.5
$75,001 TO $100,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
$100,001 TO $200,000	0.0	0.0	53.2	8.3	0.0	0.0	3.7	0.6
$200,001 TO $300,000	37.0	2.7	0.0	0.0	0.0	0.0	34.0	2.5
$300,001 TO $400,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
$400,001 TO $500,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MORE THAN $500,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note1: "%$" means percentage of total dollars claimants in each band receive.
Note2: "%claimants" means percentage of claimants in each band.

QUESTION 37

	PRIVATE PASSENGER	COMMERCIAL	MOTORCYCLE	TOTAL
NUMBER OF RECORDS	1138	406	210	1754
NUMBER USEABLE	170	69	23	262

BREAKDOWN OF INTERNAL EXPENSES	PRIVATE PASSENGER avg. size	COMMERCIAL avg. size	MOTORCYCLE avg. size	WEIGHTED avg. size
FEES PAID TO INSURER'S LAWYER	438	2,022	100	546
FEES ALLOCATED TO IN-HOUSE LAWYER	900	0	0	828
COST OF INDEPENDANT ADJUSTER	626	556	670	622
COST OF DEFENCE MEDICAL	311	429	822	324
COST OF OTHER EXPERTS	485	476	391	483
OTHER	356	352	279	355

GREEN FORM

General Instructions

1. Indicate company number, your initials and claim number clearly for future reference.

2. This survey form is to be completed for each claimant. For example, if an accident gives rise to three claimants, three separate forms have to be completed.

3. All dollar figures are in whole dollars. Absolutely no cent should be shown.

4. All dollar figures which should balance to the answers of other questions will be checked.

5. All dates are in international convention. They are shown as year, month and day.

6. Do not leave date blank. Use UN for unknown only if the information is unavailable.

7. Where a dollar amount is expected, a blank will imply 0. If there is no information to make an estimate, use UN for unknown.

8. Where a check mark "X" or a selection "a number" is expected, you MUST pick the most appropriate category. Otherwise, the form will be returned.

9. Only claim files closed between April 13, 1987 and May 24, 1987 should be surveyed.

10. If a liability factor reduced the amount paid, please so indicate.

Ontario Automobile B.I. Claims Information Sheet

1. Company number (IBC code) |__|__|__|

2. Adjuster (initials) closing file |__|__|__|__|

3. Claim or File number |__|__|__|__|__|__|__|__|__|__|__|__|__|__|

4. Claimant number |__|__|

5. Total amount paid on settlement or to satisfy judgment
   (a) for the claim $|__|__|__|__|__|__|__| [must equal 6(a) + 6(b) + 6(c) + 6(d)] if this is not a structured settlement
   (b) for costs $|__|__|__|__|__|__|__|
   (c) total $|__|__|__|__|__|__|__|
   (d) Is this a structured settlement? |__| Yes |__| No

6. Of the total amount paid by settlement or judgment, how much was paid for:
   (a) prejudgment interest $|__|__|__|__|__|__|__| [use 0 if none is paid]
   (check one box) the above figure is stated in settlement |__|
   the above figure is my estimate |__|
   (b) Family Law Reform Act or Family Law Act claims $|__|__|__|__|__|__|__|
   Please allocate this sum in accordance with the relationship between the claimant and the recipient
   Spouse $|__|__|__|__|__|__|
   Children $|__|__|__|__|__|__| Number |__|__|
   Grandchildren $|__|__|__|__|__|__| Number |__|__|
   Parents $|__|__|__|__|__|__| Number |__|__|
   Grandparents $|__|__|__|__|__|__| Number |__|__|
   Brother/Sister $|__|__|__|__|__|__| Number |__|__|
   Other $|__|__|__|__|__|__| Number |__|__|
   (c) Gross up $|__|__|__|__|__|__|

If any amount was paid in compensation because of the impact of taxation on a capital sum established for future care costs or in a fatal accident claim, please indicate what allocation was made in that regard.

(d) Other	$|_|_|_|_|_|_|
Loss of employment income to trial or settlement	$|_|_|_|_|_|_|
Loss of future employment income	$|_|_|_|_|_|_|
Out-of-pocket expense (incl. medical)	$|_|_|_|_|_|_|
Future care expense	$|_|_|_|_|_|_|
Non-pecuniary (other than FLA)	$|_|_|_|_|_|_|
Other general damage (not specifically mentioned)	$|_|_|_|_|_|_|

7. Collateral Sources:

(a) First-party accident and sickness insurance benefits paid for and received by claimant

☐ NIL

$|_|_|_|_|_|_|, but not deducted from B.I. payment

$|_|_|_|_|_|_|, and deducted from B.I. payment

☐ information not available to the B.I. insurer

(b) Employer benefit schemes

☐ NIL

$|_|_|_|_|_|_|, but not deducted from B.I. payment

$|_|_|_|_|_|_|, and deducted from B.I. payment

☐ information not available to the B.I. insurer

(c) Government-based compensation schemes (such as Canada Pension, Unemployment Insurance, Family Benefits Act, etc.)

☐ NIL

$|_|_|_|_|_|_|, but not deducted from B.I. payment

$|_|_|_|_|_|_|, and deducted from B.I. payment

☐ information not available to the B.I. insurer

(d) Disability income benefits from claimant's own automobile insurer

☐ NIL

$|_|_|_|_|_|_|, but not deducted from B.I. payment

$|_|_|_|_|_|_|, and deducted from B.I. payment

8. Does this accident involve a fatality or permanent disability?

☐ Yes ☐ No

9. Gross weekly wage $|_|_|_|_|

10. Actual time loss |_|_| YR |_|_| MO |_|_| DAYS

SUMMARIZED RESULTS FROM SUPPLEMENTARY B.I. CLAIMS SURVEY

TOTAL NUMBER OF CLAIMANTS 1646

TOTAL NUMBER OF CLAIMANTS WITH EMPLOYMENT INCOME 818

COLLATERAL SOURCES

	NOT DEDUCTED FROM BI PAYMENT		DEDUCTED FROM BI PAYMENT		NONE	NO INFO.
	#	$	#	$	#	#
FIRST-PARTY A/S	37	245,575	16	57,290	652	113
EMPLOYER	157	699,358	12	33,947	557	92
GOVERNMENT	24	66,014	14	46,148	653	127
DISABILITY INCOME	66	181,597	459	1,051,151	294	
TOTAL		1,192,544		1,188,536		

INDEMNITY FOR EMPLOYMENT INCOME LOSS TO TRIAL/SETTLEMENT	4220995
TOTAL INDEMNITY	6602075
TOTAL BEFORE TAX GROSS WAGES	6912729
TOTAL INDEMNITY IN EXCESS OF GROSS WAGES	-4.5%

SUMMARIZED RESULTS FROM SUPPLEMENTARY B.I. CLAIMS SURVEY

TOTAL NUMBER OF CLAIMANTS 1646

TOTAL NUMBER OF CLAIMANTS WITH EMPLOYMENT INCOME 818

TOTAL NUMBER OF CLAIMANTS WITH FULL INFORMATION 645

COLLATERAL SOURCES

	NOT DEDUCTED FROM BI PAYMENT		DEDUCTED FROM BI PAYMENT	
	#	$	#	$
FIRST-PARTY A/S INS BENEFITS	25	92,949	11	34,396
EMPLOYER BENEFITS	123	520,009	10	22,289
GOVERNMENT BENEFITS	22	54,507	14	46,148
DISABILITY INCOME BENEFITS	49	125,248	359	807,198
TOTAL		792,713		910,031

INDEMNITY FOR EMPLOYMENT INCOME LOSS TO TRIAL/SETTLEMENT	3049932
TOTAL INDEMNITY	4752676
TOTAL BEFORE TAX GROSS WAGES	4645869
TOTAL INDEMNITY IN EXCESS OF GROSS WAGES	2.3%

SUMMARIZED RESULTS FROM SUPPLEMENTARY B.I. CLAIMS SURVEY

TOTAL NUMBER OF CLAIMANTS 1646

TOTAL NUMBER OF CLAIMANTS WITH EMPLOYMENT INCOME 818

TOTAL NUMBER OF CLAIMANTS WITH FULL INFORMATION 645

NUMBER OF CLAIMANTS RECEIVING COLLATERAL BENEFITS 194

COLLATERAL SOURCES

	NOT DEDUCTED FROM BI PAYMENT		DEDUCTED FROM BI PAYMENT	
	#	$	#	$
FIRST-PARTY A/S INS BENEFITS	25	92,949	11	34,396
EMPLOYER BENEFITS	123	520,009	10	22,289
GOVERNMENT BENEFITS	22	54,507	14	46,148
DISABILITY INCOME BENEFITS	16	28,930	87	174,520
TOTAL		696,395		277,353

INDEMNITY FOR EMPLOYMENT INCOME LOSS TO TRIAL/SETTLEMENT	1042067
TOTAL INDEMNITY	2015815
TOTAL BEFORE TAX GROSS WAGES	1484006
TOTAL INDEMNITY IN EXCESS OF GROSS WAGES	35.8%

SUMMARIZED RESULTS FROM SUPPLEMENTARY B.I. CLAIMS SURVEY

TOTAL NUMBER OF CLAIMANTS 1646

TOTAL NUMBER OF CLAIMANTS WITH EMPLOYMENT INCOME 818

TOTAL NUMBER OF CLAIMANTS WITH FULL INFORMATION 645

NUMBER OF CLAIMANTS NOT RECEIVING COLLATERAL BENEFITS 451

COLLATERAL SOURCES

	NOT DEDUCTED FROM BI PAYMENT		DEDUCTED FROM BI PAYMENT	
	#	$	#	$
FIRST-PARTY A/S INS BENEFITS	0	0	0	0
EMPLOYER BENEFITS	0	0	0	0
GOVERNMENT BENEFITS	0	0	0	0
DISABILITY INCOME BENEFITS	33	96,318	272	632,678
TOTAL		96,318		632,678

INDEMNITY FOR EMPLOYMENT INCOME LOSS TO TRIAL/SETTLEMENT	2007865
TOTAL INDEMNITY	2736861
TOTAL BEFORE TAX GROSS WAGES	3161863
TOTAL INDEMNITY IN EXCESS OF GROSS WAGES	-13.4%

SUMMARIZED RESULTS FROM SUPPLEMENTARY B.I. CLAIMS SURVEY

NUMBER OF USEABLE RECORDS 337

FLRA/FLA CLAIMS	AMOUNT	NUMBER	%$
SPOUSE	485,639	226	29.6
CHILDREN	288,754	238	17.6
GRANDCHILDREN	3,000	2	0.2
PARENTS	644,071	131	39.2
GRANDPARENTS	50,151	20	3.1
BROTHER/SUSTER	170,427	70	10.4
OTHER	500	1	0.0
TOTAL	1,642,542		100.0

REPORT ON THE CHANGE IN LOSS COST AS A RESULT OF CHANGES IN ACCIDENT BENEFITS AND COMPENSATION ISSUES

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Introduction

We were retained by Mr. Justice Coulter A. Osborne, Commissioner of the Inquiry Into Motor Vehicle Accident Compensation in Ontario, to calculate the change in loss cost (per vehicle) that would result from the following proposals:

I. Accident Benefits

1. Medical and rehabilitation expenses up to $500,000 per person with a time limit of 20 years less the age of the person or 10 years, whichever is longer.

   Future care expense of $500,000 per person with no time limit.

2. Death benefits on the death of the head of the household of $25,000 and $10,000 for each dependant other than the spouse.

   Death benefit on the death of the spouse of the head of the household of $25,000.

   Death benefit of $10,000 if a dependent child is killed in a motor vehicle accident.

3. Funeral expense of $4,000 per person.

4. Disability

   (A) Wage Earners
   Disability income benefits for a wage earner are based on 80% of gross weekly wages less any employer benefits subject to the weekly maximum. The weekly benefit is indexed annually (by the Ontario CPI) up to 2 times the statutory weekly maximum on the date of the accident. The initial statutory weekly maximum is $450.

   (B) Students
   Each student in grade 8 or lower will receive $1,000 per school year lost. If disability continues beyond age 18, the student will receive a weekly benefit equal to 80% of the average industrial weekly wage

in Ontario on the date of the accident indexed to the date of payment.

Each student in grades 9 to 12 will receive $2,000 per school year lost. If disability continues beyond age 18, the student will receive a weekly benefit equal to 80% of the average industrial weekly wage in Ontario on the date of the accident indexed to the date of payment.

Each student attending a post secondary institution will receive $4,000 per school year lost. If disability continues beyond age 23, each will receive a weekly benefit equal to 80% of the average industrial weekly wage in Ontario on the date of the accident indexed to the date of payment.

There will be a 7 day deductible.

All government benefits are secondary to automobile benefits.

(C) House care benefits:
Benefit is payable to a principal unpaid housekeeper who is disabled as a result of a motor vehicle accident. The maximum is $50 per week. There is no time limit.

(D) Child care benefits:
For the first 4 weeks of disability, the weekly benefit is $150 plus $50 per child up to a maximum of $350 per week. If the homemaker is still disabled after 4 weeks, only actual and reasonable child care expenses incurred will be reimbursed. The maximum reimbursable expense is $150 plus $50 per child up to $350 per week.

5. Quebec part III.

6. Uninsured motorist coverage.

II. Compensation Issues

1. Abolishing the collateral source rule with collateral benefits being deducted on an after tax basis.

2. Capping prejudgment interest on non-pecuniary loss to 3.5% per annum; interest on special damages is based on the Bank of Canada rate plus 1% per annum. Interest is compounded annually.

3. Any claim under $10,000 will be tried in Small Claims Court first. No party and party costs will be allowed in this case.

III. **Reduction in liability claim cost as an offset to accident benefit enhancements.**

Conclusions

After analyzing the proposed benefits and their respective loss costs, we concluded that an overall savings will accrue to the automobile insurance system.

We estimated the reduction of claim cost to be approximately $62 to $70 million per year. If this savings is reflected in the premium calculation, an additional savings of $12 to $13 million from commissions and premium tax will be realized.

The amount of savings does vary by type of vehicle.

On the average, claim cost for trucks and cars would reduce by $24 and $13 per year per vehicle respectively. Claim cost for motorcycles or mopeds, however, will experience an increase of $31 per year if the insurance company has the right of subrogation (or $85 per year if the insurance company does not have the right of subrogation).

The amount of reduction in claim cost by type of vehicle is as follows:

Type of Vehicle	Units in 1,000s*	Change in loss cost	Claim cost reduction in $1,000s
Passenger cars	4,094	$(13)	53,222
Trucks	904	(24)	21,696
Motorcycles/mopeds	157	31 to 85	(4867) to (13345)
			70,051 to 61,573

The derivations of the change in loss cost by type of vehicle are shown in exhibits 1 to 3 (pp. 593-595).

* 1985 MTC annual report

Exhibit 1

PRIVATE PASSENGER CARS LOSS COST

	Current	Proposed	Change
Medical	7.72	18.56	10.84
Funeral	0.22	0.88	0.66
Death	1.20	3.47	2.27
Disability - wage earner	13.57	30.94	17.37
- student	nil	2.58	2.58
- house care	incl	0.16	0.16
- child care	nil	2.29	2.29
Quebec part III	0.92	0.46	(0.46)
Total no fault	23.63	59.34	35.71
Uninsured motorist	8.55	6.81	(1.74)
Total acc. benefit (a)	32.18	66.15	33.97
Bodily injury (claims only)	198.64	173.67	(24.97)
BI claim adj. expense	29.68	29.68	nil
Abolishing collateral source rule	na	(6.62)	(6.62)
Prejudgment interest rule	na	(9.14)	(9.14)
Party and party costs re: small claims court	na	(5.76)	(5.76)
Total bodily injury loss cost (b)	228.32	181.83	(46.49)
Property damage loss cost (c)	78.76	78.76	nil
Total compulsory sections, a + b + c	339.26	326.74	(12.52)

Exhibit 2

COMMERCIAL VEHICLES (Ordinary Trucks)

	Current	Proposed	Change
Medical	2.87	6.89	4.02
Funeral	0.14	0.56	0.42
Death	0.94	2.72	1.78
Disability - wage earner	6.55	14.93	8.38
- student	nil	1.24	1.24
- house care	incl	0.06	0.06
- child care	nil	0.92	0.92
Quebec part III	0.64	0.32	(0.32)
Total no fault	11.14	27.64	16.50
Uninsured motorist	2.86	2.39	(0.47)
Total acc. benefit (a)	14.00	30.03	16.03
Bodily injury (claims only)	213.41	195.15	(18.26)
BI claim adj. expense	31.89	31.89	nil
Abolishing collateral source rule	na	(5.65)	(5.65)
Prejudgment interest rule	na	(9.82)	(9.82)
Party and party costs re: small claims court	na	(6.19)	(6.19)
Total bodily injury loss cost (b)	245.30	205.38	(39.92)
Property damage loss cost (c)	113.30	113.30	nil
Total compulsory sections, a + b + c	372.60	348.71	(23.89)

Exhibit 3

MOTORCYCLES LOSS COST

		w/o subrogation		w/ subrogation	
	Current	Proposed	Change	Proposed	Change
Medical	17.06	40.94	23.88	-	-
Funeral	1.06	4.24	3.18	-	-
Death	2.49	7.20	4.71	-	-
Disability - wage earner	41.89	95.51	53.62	-	-
- student	nil	21.36	21.36	-	-
- house care	incl	0.04	0.04	-	-
- child care	nil	0.57	0.57	-	-
Quebec part III	1.61	0.81	(0.80)		
Total no fault	64.11	170.67	106.56	85.34	21.23
Uninsured motorist	18.74	14.83	(3.91)	14.83	(3.91)
Total acc. benefit (a)	82.85	185.50	102.65	100.17	17.32
Bodily injury (claims only)	74.40	64.73	(9.67)	93.74	19.34
BI claim adj. expense	11.12	11.12	nil	13.90	2.78
Abolishing collateral source rule	na	(2.59)	(2.59)	(2.59)	(2.59)
Prejudgment interest rule	na	(3.42)	(3.42)	(3.42)	(3.42)
Party and party costs re: small claims court	na	(2.16)	(2.16)	(2.16)	(2.16)
Total bodily injury loss cost (b)	85.52	67.68	(17.84)	99.47	13.95
Property damage loss cost (c)	17.21	17.21	nil	17.21	nil
Total compulsory sections, a + b + c	185.58	270.39	84.81	216.85	31.27

Methodology and Assumptions

Our methodology assumes that the 1987 loss cost (as determined by I.B.C.) is representative of the current cost if no change in the policy is made. Each proposed change (whether it is a no fault benefit or a tort reform issue) is measured against the current cost.

Wherever possible, each claimant in the claims survey is subject to a policy change and the aggregate result of all claimants in the sample is compared against the actual figure to arrive at a percentage increase or decrease. This percentage change is then applied to the 1987 loss cost to determine the change in loss cost.

When it is not practical to analyze each claimant individually, total industry data is used, e.g. death benefit, funeral expense, Quebec part III, etc. The details of each proposed change and its impact on insurance loss cost can be found in the following sections:

I
1. Medical/rehabilitation
2. Death benefit
3. Funeral expense
4. Disability benefit
    A. wage earners
    B. students
    C. house care
    D. child care
5. Quebec part III
6. Uninsured motorist coverage

II
1. Abolishing the collateral source rule
2. Prejudgment interest
3. Party and party costs, and small claims court

III 1. Reduction in liability claim cost as an offset to accident benefit enhancements.

Limitations

While we have tried to verify our assumptions, it is not always possible. In these cases, we have to rely on our best judgment.

Not all of our assumptions should be considered equally reliable. With respect to tort reform, we have assumed that non-pecuniary loss will not be affected by any or all of the tort reform measures. This may or may not be true. The abolition of the collateral source rule could create an incentive for the employer to exclude disability due to automobile accidents in its group health policy. We have assumed that this will not occur. On the other hand, we have assumed that all severely injured persons would consume the policy limit on medical/ rehabilitation and future care expense. This is probably not true.

We have employed detailed claimant data that was not available in the past. We believe it is the best information available. However, there is always some sampling error when one uses a small percentage of the population. In order to provide a margin for error, we have estimated the increase in no fault benefits on the high side and the reduction due to tort reform on the low side.

Detailed Analysis by Section

I 1. Medical/rehabilitation

Current:

reasonable and essential expenses, excess of OHIP, up to $25,000 per person within 4 years

Proposed:

(a) rehabilitation to a maximum of $500,000 within 10 years or 20 years less the age of victim at the time of accident, whichever is longer.

(b) long term care up to $500,000, no time limit.

Assumptions:

(a) The bodily injury claims survey was used to determine distribution of time loss. The accident benefits claims survey was used to determine the frequency of injuries requiring such a benefit. The IBC size of loss distribution was used to determine the frequency of claims with large disability payments.

(b) 0.2% of the claimants are so severely injured that major renovations of residence or vehicles are necessary; all $500,000 will be used up, $185,000 in year one and $35,000 in each of the subsequent nine (9) years. The 0.2% was selected after a study of the IBC size of loss distribution in policy years 1983/1984 and the percentage of claimants with catastrophic injuries in our sample.

(c) 6.5% of the claimants either recover or cannot satisfy the more stringent definition of disability after 2 years. They are assumed to have partial disability and require vocational training @ $4,000 per person. Such cost is not in the current system because the rehabilitation industry is still in its infancy stage.

(d) 0.2% of the claimants require long term care -- cost starts at $3,000/mo. increased by 5.5% p.a. -- until the limit is eventually used up. The first monthly payment is made after 12 months.

(e) Medical claim frequency is assumed to be 0.00644 being the average of the 1984 and 1985 policy years.

(f) All present values are based on a discount rate of 8% p.a.

Costs:

(i) Private Passenger Rehabilitation Cost

= vocational training + renovations

$$= (.065 \times .00644 \times \$4000) + (.002 \times .00644 \times [\$150000 + \sum_{n=0}^{9} \$35000 + 1.08^{n}])$$

= \$1.67 + \$5.20

= \$6.87

(ii) Private Passenger Future Care Expense

= frequency x average claim amount

$$= (.002 \times .00644) \times \sum_{n=0}^{124} \frac{3000}{1.08} \times [(1+j)/(1+i)]^{n} \qquad 1+j = \sqrt[12]{1.055} \qquad 1+i = \sqrt[12]{1.08}$$

= \$3.97

(iii) Medical and Rehabilitation Cost Increase

= \$6.87 + \$3.97

= \$10.84

(iv) Current Medical and Rehabilitation Cost

= \$7.72

(v) Percentage Increase

= 100% x \$10.84/\$7.72

= 140%

Assuming the same percentage increase, i.e., 140% of the current benefit, the total increase in medical/rehab will be \$4.02 (\$2.87 x 1.40) per commercial vehicle and \$23.88 (\$17.06 x 1.40) per motorcycle.

I 2. Death Benefits

Current:

(a) The death of the head of household results in a payment of $10,000 to the spouse of the head of household plus an additional sum of $1,000 for each other survivor.

(b) The death of the spouse of the head of household results in a payment of $10,000 to the head of the household.

(c) The death of a dependant results in a payment of $2,000.

Proposed:

(a) The death of the head of household results in a payment of $25,000 to the spouse of the head of household plus an additional sum of $10,000 for each other surviving dependant.

(b) The death of the spouse of the head of household results in a payment of $25,000 to the head of household.

(c) The death of a dependant results in a payment of $10,000.

Assumptions:

(a) The results are based on 1983-1985 IBC data.

(b) Under both the current system and the revised system, benefit is based on the status at the date of the accident of the deceased in a household, where a spouse and/or dependants survive.

(c) The dollar band from $3,000 to $9,998 was purposely omitted from our calculations as these amounts seemed implausible under the current system.

Costs:

Based on the 1983-1985 distributions, the proposed benefit schedule will increase cost by 189%.

The proposed benefit will result in an increase of $2.27 per private passenger automobile (189% x $1.20).

The same percentage increase, i.e., 189%, was assumed for motorcycles and commercial vehicles resulting in a per vehicle increase of $4.71 (189% x $2.49) and $1.78 (189% x $0.94) respectively.

I 3. Funeral Expense

Current:

$1,000 per claimant fatally injured in accident.

Proposed:

$4,000 per claimant fatally injured in accident.

Assumption:

Current costs are based on the IBC submission to the Inquiry.

Costs:

The cost of the proposed benefit is 400% of the current benefit.

(i) current cost for private passenger vehicle = $0.22

proposed cost for private passenger vehicle = $0.88

increase = $0.66

(ii) current cost for commercial vehicle = $0.14

proposed cost for commercial vehicle = $0.56

increase = $0.42

(iii) current cost for motorcycles = $1.06

proposed cost for motorcycles = $4.24

increase = $3.18

I 4. Disability Benefit

A. Wage Earner

Current:

80% of gross weekly wages less employer and government benefits. The maximum weekly benefit is $140. There is no waiting period.

Proposed:

Subject to a 7 day waiting period, 80% of gross weekly wages less employer benefits or the statutory weekly maximum; whichever is smaller is indexed to CPI up to 2 times the statutory weekly benefit maximum at the time of accident, the initial statutory weekly maximum is $450.

Assumptions:

(a) Results and costs are based on the information contained in the accident benefits claims survey.

(b) If a claimant in the claims survey appeared to receive a weekly payment higher than the current maximum, his time loss was recalculated using $140 as the weekly benefit.

(c) Time loss is subject to a seven (7) day deductible.

(d) Only claimants with time loss, non-zero weekly wage and known employer benefits (need not be non-zero) were included in the analysis.

(e) All government benefits (CPP and UIC) are first payors in the current benefits, but they are considered as last payors in the proposed benefits.

(f) Disability benefits for claimants receiving employer benefits less than their gross wage loss are calculated in different manners depending on length of disability.

(i) For the first two (2) weeks of disability after the waiting period, the claimant receives 80% of gross wage loss; subject to a statutory maximum* unless the claimant receives 100% of his gross wage from his employer in which case there is no benefit payable.

(ii) For the remainder of disability, the claimant receives 80% of gross wage loss less employer benefits, i.e., benefit = (.80 x gross wage loss) - employer benefits, subject to a statutory maximum*.

* The initial statutory maximum is $450.

(g) The change in Consumer Price Index in Ontario is 5.5% per annum. In practice, indexing usually occurs once a year, say 1 January. To simplify our calculation, we assume indexing occurs monthly.

(h) Only private passenger data from the survey is used to determine the percentage increase of the proposed benefits over the current benefits. As there are no permanent disability claimants in the sample, we assume 0.2% of the claimants are permanently disabled. The 0.2% was selected after a study of the IBC size of loss distribution in policy years 1983/1984 and the percentage of claimants with catastrophic injuries in our sample.

(i) From the claims survey, 0.9% of the claimants have disability beyond two years. Together with assumption (h), we assume 1.1% of the claimants have disability for over two years.

(j) Twenty percent of the injured persons would not receive any disability payment because their employer benefits are at least 80% of their gross wages. In order to put them on an equal footing with claimants who do not have employer benefits, these claimants will receive the incremental benefit due to indexing after 2 years of disability. Here, we assume

(i) their employer benefits are not indexed;

(ii) the average weekly wage is 125% of \$450.

(k) Mortality rate is based on 85% of the 1969-1975 Canadian Institute of Actuaries Mortality Table. Current studies indicate that mortality rate is about 80% to 85% of the 1969-1975 C.I.A. Mortality Table.

(l) All present values are calculated using a discount rate of 8% p.a.

(m) All permanently disabled claimants are assumed to be aged 30.

Costs:

Private Passenger:

(i) Cost of claimants with non-permanent injuries

$$= \sum_{k=1}^{c} \sum_{t=1}^{time} [\min \{(2 \times m);(ben_k \times (1+i)^t)\}] + (1+j)^t$$

$= \$1,141,575$

time = time loss in months
c = number of claimants in sample
i = index rate = 5.5% p.a. converted to monthly rate
j = discount rate = 8% p.a. converted to monthly rate
ben_k = weekly benefit of kth claimant in the sample
m = maximum weekly benefit = \$450

(ii) Cost of claimant aged 30 with permanent injuries

$$= \sum_{t=1}^{912} [\min \{(2 \times m);(4.33 \times ben \times (1+i)^t)\}] \times {}^{n}30+t/12 + (1+j)^t$$

$= \$421,597$

ben = weekly benefit = .80 x \$450 = 360

${}^{n}30+t/12$ = survival rate in the $(30+t/12)^{th}$ year

Cost of claimants with permanent injuries
= (number of claimants in sample) x (frequency) x (average claim amount)
= (298) x (.002) x \$421,597 = \$251,272

(iii) Cost of benefit to wage earners with employer benefits less than 80% of their gross wage loss

= (cost of claimants with non-permanent injures) + (cost of claimants with permanent injuries)
= \$1,141,575 + \$251,272 = \$1,392,847

(iv) Private Passenger (cont'd.):

Cost of benefit to wage earners with employer benefits of at least 80% of their gross wage loss

= (number of claimants) x (frequency) x average claim amount

= (298) x (0.20) x 0.002 x

$$\sum_{t=1}^{\infty} \frac{4.33 \times \min.[\$900; \$450 \times (1+j)^{24+t}] \times {}^{n}(32+t/12)}{(1+j)^{24+t}} - \sum_{t=1}^{\infty} \frac{4.33 \times \$450 \times {}^{n}(32+t/12)}{(1+j)^{24+t}}$$

= (298 x .0004) x \$176,555
= \$21,045

(v) Current Private Passenger:

Cost of benefit to wage earners with employer benefits of less than 80% of their gross wage loss
= (cost of claimants with non-permanent injuries) + (cost of claimants with permanent injuries)
= \$563,946 + [(298) x (.002) x \$93,921]

= $619,923

(vi) Total increase in benefits to wage earners with employer benefits less than 80% of their gross weekly wage loss
= $1,392,847 - $619,923 = $772,924

Percentage increase = $\frac{\$772,924}{\$619,923} \times 100 = 125\%$

Total increase in benefits to wage earners with employer benefits at least 80% of their gross weekly wage
= $21,045

Percentage increase = $\frac{\$\ 21,045}{\$619,923} \times 100 = 3\%$

(vii) The benefit to wage earners will result in an increase in loss cost of 128.0% or $17.37 (1.28 x $13.57) per private passenger vehicle. Assuming the same percentage increase for commercial vehicles and motorcycles, the increase in loss cost is $8.38 (1.28 x $6.55) and $53.62 (1.28 x $41.89) respectively.

B. Student

Current:

none

Proposed:

(a) Until deemed eligible to enter the work force, a lump sum yearly payment of:

- (i) $1,000 per year lost at the elementary school level
- (ii) $2,000 per year lost at the secondary school level
- (iii) $4,000 per year lost at the post-secondary school level.

(b) A student with a lengthy disability will be eligible to receive a weekly benefit if, at the time of the accident:

- (i) he is attending elementary school and attaining age nineteen (19) while still disabled
- (ii) he is attending secondary school and attaining age nineteen (19) while still disabled
- (iii) he is attending a post-secondary institution and attaining age twenty-three (23) while still disabled

at which time he/she will receive a weekly benefit of 80% of the average industrial weekly wage in Ontario on the date of accident.

Assumptions:

There is a downward bias for students to be included in the accident benefits claims survey as only claimants eligible for accident benefits are included. Since there does not exist a current benefit in the form of a student benefit, some students would be omitted from the survey.

(a) Due to the limited information obtained on students via the accident benefits claims survey, the bodily injury claims survey is used in arriving at the distribution of students by scholastic level and vehicle type.

(b) To be included in this analysis, the claimant must be a student and experience time loss as a result of the accident. It is assumed that the number of claimants will increase by 15% in the case of cars and trucks and 31% in the case of motorcycles if the benefit were available today.

(c) As the claims survey did not include information on level of schooling, level of schooling was determined by age.

A claimant is deemed to be:

- (i) at the elementary school level if fourteen (14) years of age or under
- (ii) at the secondary school level if fifteen (15) to eighteen (18) years of age
- (iii) at the post-secondary school level if nineteen (19) years of age or over.

(d) A claimant is deemed to lose a year of education if disabled for thirteen (13), six (6), and three (3), weeks of a school year at the elementary, secondary and post-secondary school levels respectively.

(e) The lump sum yearly benefits are based on the grade the claimant would be attending if not disabled.

(f) As there is limited information on students with lengthy disabilities, it is assumed that 1.1% of the students would remain disabled after two (2) years and 0.2% would remain disabled beyond three (3) years.

(g) In calculating average lump sum amounts, the data obtained in the accident benefits claims survey are used.

(i) the average lump sum payment paid to students involved in private passenger and commercial vehicle accidents assumes that the student is equally likely to be in attendance at an elementary school, a secondary school, or at a post-secondary institution.

(ii) the average lump sum payment paid to students involved in motorcycle accidents assumed that the student is equally likely to be in attendance at a secondary school or at a post-secondary institution.

(h) Additional cost of permanently disabled students is based solely on the data obtained in the bodily injury claims survey. This additional cost is the present value of 80% of the average industrial wage in Ontario; indexed at 5.5% p.a. compounded monthly, discounted at 8% p.a. compounded monthly, and mortality is assumed to be 85% of 1969-1975 CIA Mortality Table. Due to limited information on permanently disabled students, this present value is based on the median age at each scholastic level.

(i) the additional cost for students involved in private passenger and commercial vehicle accidents is predicated on the assumption that students are equally likely to be in attendance at an elementary school, a secondary school or at a post-secondary institution.

(ii) the additional cost for students involved in motorcycle accidents is based on students being equally likely to be in attendance at a secondary school or a post-secondary institution.

Costs:

(i) Current cost for sample claimants
= $563,946 + (298) x (.002) x ($93,921)
= $619,923 (same as wage earner)

(ii) Loss of schooling
(Number of students) x average claim amount
= (298 x .15) x $1,901 = $84,975

Increase over current cost = $100% x $84,975/$619,923 = 14%

The loss of schooling benefit, i.e., the lump sum payment, for private passenger and commercial vehicle accident claimants will result in an increase of 14.0%. The increase for motorcycle accident claimants will be more than double at 39.0% (298 x .31 x $2,627/$619,923).

(iii) Loss of capacity to earn income
(Number of permanently disabled students) x average claim amount (298 x .15 x .002) x $365,000 = $32,631
Increase over current cost = $32,631/$619,923 = 5%

The loss of capacity to earn income, i.e., the benefit to students with long term disability, for private passenger and commercial vehicle accident claimants will result in an increase of 5.0%. The increase for motorcycle accident claimants will be more than double at 12% (298 x .31 x .002 x $406,000/$619,923).

The benefit to students will result in an increase in loss cost of 19% or $2.58 (.19 x $13.57) per private passenger car, $1.24 (.19 x $6.55) per commercial truck. The increase in loss cost for motorcycles, however, will be 51% or $21.36 per vehicle (.51 x $41.89).

C. House Care

Current:

Reasonable expenses incurred up to a maximum of $70 per week of disability, subject to a maximum benefit period of twelve (12) weeks.

Proposed:

Reasonable expenses incurred up to a maximum of $50 per week of disability, not subject to a maximum benefit period.

Assumptions:

(a) Results and costs are based on the information contained in the Accident Benefits Claims survey.

(b) Only homemakers with time loss and non-zero principal unpaid housekeeper benefits are considered.

Costs:

House care benefit:
Private Passenger loss cost
= frequency x average claim amount
= {frequency of disability x (number of homemakers/total number of claimants)} x $410
= .0052 x .076 x $410
= $.016

Commercial auto: 40% of PP loss cost = $0.06

Motorcycles: 25% of PP loss cost = $0.04

D. Child Care

Current:

None

Proposed:

(a) For the first 4 weeks of disability, the weekly benefit is $150 plus an additional $50 per week per child/dependant, subject to a maximum of $350 per week. If disability continues beyond 4 weeks, only actual and reasonable child care expenses incurred will be reimbursed. The maximum reimbursable expense is $150 plus $50 per child up to $350 per week.

Assumptions:

(a) Only homemakers with time loss are included to determine the average claim amount.

(b) Frequency is based on average 1984-1985 IBC data.

(c) Proportion of claimants who are homemakers from the accident benefit claims survey.

(d) Double frequency of child care to reflect increased utilization.

(e) Since the claims survey data does not contain information as to the number of children/dependants, one (1) child/dependant per household is assumed.

(f) Child/dependant care benefits after the first four (4) weeks of disability is computed on the basis of $200 per week.

Costs:

Child care benefit:
Private Passenger loss cost
= {frequency x 2 x (number of homemakers/total number of claimants)} x average claim
= (.0052 x 2.0 x 0.076) x $2900
= $2.29

Commercial auto loss cost = 40% of PP loss cost
= $2.29 x .40
= $.092

Motorcycle loss cost = 25% of PP loss cost
= $0.57

I 5. Quebec Part III

Current:

Pays for the difference between Ontario automobile benefits and Quebec Régie's benefits.

Proposed:

Pays for the difference between Ontario automobile benefits and Quebec Régie's benefits.

Assumption:

The difference between Quebec Régie's benefits and the Ontario automobile benefits will narrow by at least 50% due to the enhancement of Ontario no fault benefits (section B).

Cost:

Current loss costs for private passenger cars, trucks and motorcycles are $0.92, $0.64 and $1.61 respectively. Savings should be 50% of the current loss costs. Therefore, savings per car, truck and motorcycle will be $0.46, $0.32 and $0.80 respectively.

I 6. Uninsured Motorist Coverage

Current:

Coverage against accidents caused by uninsured motorists.

Proposed:

Coverage against accidents caused by uninsured motorists.

Assumptions:

Since the benefits are similar to that paid by the third party liability section (A) of the policy, the same percentage reduction in loss cost would occur.

Cost:

Loss cost will reduce by \$1.74 per private passenger automobile, \$0.47 per commercial vehicle, and \$3.91 per motorcycle.

The above figures are derived as follows:

$$\text{uninsured motorist loss cost x } \frac{\text{BI reduction}}{\text{BI loss cost}}$$

For cars: \$ 8.55 x \$46.49/\$228.32=\$1.74
For trucks: \$ 2.86 x \$39.92/\$245.30=\$0.47
For motorcycles: \$18.74 x \$17.84/\$85.52=\$3.91

II 1. Collateral Source Rule

Current:

Collateral Source Rule: A claimant can claim economic loss against the tort feasor even though he/she has been fully/partially compensated by "collateral sources", i.e., employer benefits, government programs, accident/sickness insurance, or any combination thereof.

Proposed:

Abolish the Collateral Source Rule. Compensation from "collateral sources" less the applicable 1988 income taxes is deducted from bodily injury liability payment.

Assumptions:

(a) The bodily injury claims survey and the supplemental bodily injury claims survey are used.

(b) Collateral benefits are reported accurately without any understatement.

(c) Claimants must have time loss, gross wage loss, and full information on employer benefits to be included in this analysis.

(d) If a claimant in the claims survey appears to receive a (section B) weekly disability payment higher than the current maximum, his/her time loss is recalculated using $140 as the weekly benefit.

(e) Government benefits and employer benefits net of 1988 income taxes, and first party accident/sickness benefits are deducted from third party liability payments.

(f) Increase in Section B benefit is taken into account.

(g) Percentage of claim amount attributable to employment income loss is 23.8%, 18.9% and 24.9% for cars, trucks and motorcycles respectively.

Costs:

Based on the detailed claimant data in the bodily injury claims survey and the supplemental bodily injury claims survey, 14% of the bodily injury claims amount will be eliminated if the collateral source rule is abolished. Assuming the same percentage of reduction is realized by each type of vehicle, private passenger cars should have \$6.62 savings per vehicle while commercial trucks and motorcycles should have savings of \$5.65 and \$2.59 per vehicle respectively.

The amount of claims reduction is derived as follows:

(current bodily injury claim amount) x (employment income portion of claim) x .14

For cars:	\$198.64 x .238 x .14 = \$6.62
For trucks:	\$213.41 x .189 x .14 = \$5.65
For motorcycles:	\$ 74.40 x .249 x .14 = \$2.59

Additional Comments:

The above calculations are based on short run (12-18 months) expectations. Some employers may decide to exclude disability due to automobile accident in their group accident/sickness contracts if they feel that the savings in health insurance premium is substantial. If many employers put the automobile accident exclusion clause in their contracts, our savings projection will be overstated. However, we do not feel that it is very practical for an employer to introduce such a clause until he/she has sufficient experience and monetary incentive to do so.

II 2. Prejudgment Interest

Current:

Based on prevailing interest rate, in practice however, this is not always followed.

Proposed:

(a) Prejudgment interest on non-pecuniary loss is calculated at 3.5% p.a. compounded annually.

(b) Prejudgment interest on special damages is calculated at a rate equal to the Bank of Canada rate plus 1% p.a. compounded annually.

Assumptions:

(a) Based on the composite result of the bodily injury claims survey, prejudgment interest is 10.2% of the average claim amount for all types of vehicles.

(b) Claimants must receive some prejudgment interest to be included in this analysis.

(c) No significant difference between stated and estimated prejudgment interest rates. This is confirmed by a standard statistical test.

(d) Special damages are incurred evenly from date of accident to date of settlement.

(e) Non-pecuniary loss is incurred on the date of accident.

(f) To simplify calculations, interest is compounded monthly at a rate equivalent to those specified in the proposal.

(g) Time till settlement, i.e., (settlement date - accident date), is rounded to the nearest month.

(h) The Bank of Canada rate is initially set at 8.25% p.a.

Costs:

Based on the bodily injury claims survey, prejudgment interest should decline 45.1% if the proposed rates of interest were used.

The proposed benefit will result in a savings of 45.1% or a reduction in loss cost of $9.14 per private passenger automobile. Assuming the same savings of 45.1% for commercial vehicles and motorcycles, the reduction in loss cost is $9.82 and $3.42 respectively.

The above figures are derived as follows:

Bodily injury claim amount x prejudgment interest portion x .451

For cars:	$198.64 x .102 x .451=$9.14
For trucks:	$213.41 x .102 x .451=$9.82
For motorcycles:	$ 74.40 x .102 x .451=$3.42

II 3. Small Claims Court

Current:

No restriction as to which court the case is to be tried.

Proposed:

All cases under $10,000 must be tried in Small Claims Court first. No party and party costs for claims under $10,000.

Assumptions:

(a) Claim size distribution is based on the bodily injury claims survey.

(b) A claim that results in a court award or settlement of less than $10,000 will receive no party and party costs.

Costs:

Based on the bodily injury claims survey, party and party costs among claims below $10,000 were 2.9% of the total bodily injury claim amount.

The proposal will reduce loss cost of $5.76 per private passenger automobile, $6.19 per commercial vehicle and $2.16 per motorcycle.

The above figures are derived as follows:

(Bodily injury claim amount) x 0.029

For cars: $198.64 x .029 = $5.76
For trucks: $213.41 x .029 = $6.19
For motorcycles: $ 74.40 x .029 = $2.16

III 1. Reduction in Liability Claim Cost as an Offset to Accident Benefit Enhancements

When the accident benefits are increased substantially, they would reduce the economic loss component and sometimes non-economic loss component of the bodily injury claim. This offset has always been recognized by the insurance industry.

The claims survey, however, allows us to quantify the extent of the offset more precisely than in the past. If a claimant is not totally at fault, then all the accident benefits received could be deducted from his third party liability entitlement.

Based on the claims survey, 70% of the injured persons in private passenger cars and trucks were not totally at fault. Therefore, we assumed 70% of the enhanced benefits will be offset by a dollar-for-dollar third party liability reduction.

For cars, the offset
= .70 x accident benefit enhancement
= .70 x $35.67 = $24.97

Trucks do not always collide with trucks. In fact, they usually collide with cars. Therefore, their offset would be more like the amount for cars. We assumed they collide with cars half of the time (note: actual indication was 74%) and collide with other vehicle types half of the time.

For trucks, the offset
= .70 x 1/2 [truck accident benefit enhancement + car enhancement]
= .70 x 1/2 [$16.51 + $35.67]
= $18.26

Motorcycles belong to a unique category. From the claims survey, we concluded only half of the injured persons were not totally at fault. Furthermore, 33% of them were involved in single vehicle accidents and 16% were victims of motorcycle to motorcycle accidents.

The offset for motorcycles (if there is no-subrogation)
= 1/2 economic loss component of B.I. (see bodily injury liability claims survey)
= 1/2 x (.26) x $74.40
= $9.67

If subrogation right is given to the motorcycle insurer (as well as the other insurer involved in a motorcycle related accident), the liability loss cost could increase by as much as 100% of economic loss component of B.I.
= $74.40 x 0.26
= $19.34

Furthermore, subrogation should increase claim adjustment expense by as much as 25%.
= .25 x $11.12
= $2.78

APPENDIX IV

Exhibit I

SUMMARY OF FINDINGS ON CHANGE IN LOSS COST

on going from Current System to Proposed Modified No-Fault System

Ontario Private Passenger Automobile (ex. Farmers)
All Mandatory Coverages (including OHIP Levy in lieu of Subrogation)

1987 Fiscal Policy Year (i.e.: Policies written 01/07/86 to 30/06/87 inclusive)

	Mandatory Coverage/Kind of Loss [1]	1987 F.P.Y. Ultimate Loss Cost per Car [2]	% Present Value Factor [3]	Old 1987 P.V. of Loss Cost per Car [4]	% Ratio New/Old [5]	New 1987 P.V. of Loss Cost per Car [6]	New-Old P.V. Difference [7]
(01)	Funeral	0.24	93.43	0.22	250.0	0.55	0.33
(02)	Medical + Rehabilitation	9.52	81.12	7.72	425.0	32.81	25.09
(03)	Death Benefits	1.28	93.43	1.20	263.0	3.16	1.96
(04)	Disability Income	16.72	81.12	13.57	394.0	53.47	39.90
(05)	Sub-Total of Above	27.76	81.81	22.71	396.3	89.99	67.29
(06)	Quebec Excess (Part III)	1.14	81.12	0.92	30.0	0.28	-0.64
(07)	Uninsured Motorist	11.05	77.39	8.55	60.0	5.13	-3.42
(08)	Accident Benefits Total	39.95	80.55	32.18	296.5	95.40	63.22
(09)	Bodily Injury up to Cut-off	118.89	86.49	102.83			-102.83
(10)	Bodily Injury over Cut-off	176.13	71.25	125.49	75.0	94.12	-31.37
(11)	Bodily Injury Total	295.02	77.39	228.32	41.2	94.12	-134.20
(12)	Property Damage	84.30	93.43	78.76	100.0	78.76	
(13)	Third Party Liability Coverage	379.32	80.96	307.08	56.3	172.88	-134.20
(14)	Sub-Total of Above	419.27	80.92	339.26	79.1	268.28	-70.99
(15)	OHIP Levy	8.38	100.00	8.38	100.0	8.38	
(16)	Grand Total Mandatory	427.65	81.29	347.64	79.6	276.66	-70.98

Notes: 1) Column [2]: Rows (1)-(4),(6),(7),(11),(12),(15) from related pages of Exhibit III; Row (10) = 59.7% of Row (11) (See Exhibit II). Other Row values by Addition/Subtraction.

2) Column [3]: Rows (1),(3),(12) as Property Damage; Rows (7),(11) as Bodily Injury; Row (8) as Accident Benefits (See Exhibit IV). Column [3]: Rows (9),(15) from Exhibit II; other Row values to balance.

3) Column [4] = Column [2] x Column [3]. Present Value is at 01/01/87 at 8% Effective Interest Rate.

4) Column [5]: Rows (1)-(4),(6),(7),(9),(10),(12),(15) from Exhibit II; other Rows calculated to balance.

5) Column [6] = Column [4] x Column [5]. Column [7] = Column [6] - Column [4].

6) Costing assumes no change in the Tort System, except restriction of tort to excess Economic Loss and Serious and Permanent Injury.

Time: 7:17:35 p.m. Apr. 23, 1987

Exhibit II-1

(A) Funeral Coverage

Current:	Expenses incurred up to $1,000 per person.
Proposed:	Expenses incurred up to $2,500 per person.
Assumptions:	All get now a flat $1,000 and will get a flat $2,500 under proposed.
Adjustment Factor:	2.50

Exhibit II-2

(B) Medical and Rehabilitation Coverage

Current: Reasonable and essential expenses, excess of government and other plans, up to $25,000 per person within a 4-year time limit.

Proposed: As current, but no dollar or time limit except a $200,000 maximum per person on those expenses related to long-term care of persons unable to sustain an independent lifestyle.

Assumptions:

1. All current costs will remain.
2. An additional $200,000 cost will be added for each of the 2% of D.I. claimants contemplated to be permanently totally disabled (see D.I. analysis, Duration of Disability table and also Appendix E for 1983 F.P.Y. size of loss distribution for medical + funeral + rehabilitation at the 42 month level).
3. There will be, in addition, a 15% frequency increase.

Adjustment Factor: For 1987 F.P.Y. (see Trend Calculations in Exhibit III. Note: * below denotes exponentiation).

Medical and rehabilitation:

Frequency: .551 x 1.106 * 4 x .30 + .601 x 1.106 *3 x .35 + .687 x 1.106 * 2 x .35

= .826

$$\text{Severity} = \frac{100 \times 9.52}{.826} = 1,153$$

Disability Income:

Frequency = .423 x 1.072 * 4 x .30 + .490 x 1.072 * 3 .35 + .544 x 1.072 * 2 x .35

= .598

Proposed severity for Medical and Rehabilitation:

$$= 1,153 + .02 \times \frac{.598}{.826} \times 200,000 \times 1.073$$

= 1,153 + 3,107 = 4,260

$$\text{Adjustment Factor} = \frac{4,260}{1,153} \times 1.15$$

= 4.25

Exhibit II-3

(C) Death Benefits

Current: $10,000, Head of House or Spouse (1st survivor) + $1,000 (each additional dependant survivor). $2,000 non-spouse dependant. Death ensuing up to 180 days or 104 weeks if continuously disabled.

Proposed: 200% of unit benefit, Head of House or Spouse (1st survivor) + 25% of unit benefit (each additional dependant survivor). Any other person, provable expenses up to $2,500. Death ensuing up to 180 days or 104 weeks if continuously disabled.

Unit Benefit = Annual D.I. Benefit (before any offsets) subject to a minimum of $5,000 and a maximum of $31,307.

Assumptions:

1. All 'other persons' will receive the maximum $2,500.
2. Not all members of the population have equal exposure to death in automobile accidents.

Adjustment Factor: See Death Benefit table following.

With normalization to proposed count eligible, we have:

Average proposed severity over all wage levels = 14,726.
Average current severity over all wage levels = 6,244.
Ratio = 2.36

At annual gross of 25,092, the corresponding ratio = $\frac{17,263}{5,978} = 2.89$

Selected Factor = $\frac{2.36 + 2.89}{2} = 2.63$

Exhibit II-4

ONTARIO DEATH BENEFITS

Data Source: Revenue Canada Taxation Statistics, 1984 Taxation Year, Table 2, All Personal Returns by Total Income, Ontario only.

Data Description: All Returns including those with $0 Employment Income. Gross Income from Employment taken as Wages and Salaries Income adjusted for other Sources of Employment Income (Commissions from Employment, other Employment Income, and Net Business, Professional, Commission, Farming, and Fishing Income), adjusted to 1987 Income Levels (trended at 4.5% per annum).

Unit Benefit: 90% of Annual Net Income, subject to a Minimum of $5,000 and a Maximum of $31,307. Annual Net Income approximated from adjusted Gross Income from Employment by Deduction of C.P.P. Tax, U.I.C. Tax, and Income Tax at 1987 Levels. Income Tax calculated assuming no Income other than Income form Employment, and assuming no Deductions other than Employment Expense Deduction, Basic Personal Exemption, and displayed number of Dependant Married and Child Exemptions.

Analysis: Discrete Approximation based on a 74 interval partition of Tax Return Total Income. Number of Other Spouses taken as 70% of Column [2], less Column [3]. 90% Net Income Capped at $600 per Week.

Current Benefits: House Head or Spouse Death: $10,000 (1st Survivor) + $1,000 (each other dependant Survivor);
Dependant Non-Spouse Death: $2,000

Proposed Benefits: House Head or Spouse Death: 200% of Unit Benefit (1st Survivor) + 25% of Unit Benefit (each other dependant Survivor);
Death of Person without Spouse or Dependants: $2,500

						Average Current Benefit per Claimant				Average Proposed Benefit per Claimant			
100% Ann. Gross Wage	Number Earning	# Dependt Spouses	# Other Spouses	# Dependt Children	New Unit Benefit	Wage Earner	Dependant Spouse	Dependant Child	Total	Wage Earner	Dependant Spouse	Dependant Child	Total
0	1,023,363	132,969	583,385	316,581	5,000	7,309	10,442	2,000	6,451	8,137	10,552	2,500	7,143
657	76,285	12,561	40,839	19,143	5,000	7,251	10,358	2,000	6,682	8,064	10,448	2,500	7,355
1,308	53,581	5,723	31,784	20,157	5,000	7,376	10,537	2,000	6,240	8,220	10,672	2,500	6,946
1,796	54,731	3,844	34,468	9,733	5,000	7,178	10,254	2,000	6,613	7,972	10,318	2,500	7,325
2,241	62,204	3,075	40,468	7,826	5,000	7,126	10,180	2,000	6,706	7,907	10,225	2,500	7,426
2,700	62,954	3,729	40,339	7,615	5,000	7,121	10,173	2,000	6,749	7,901	10,216	2,500	7,464
3,176	68,193	4,041	43,694	5,742	5,000	7,084	10,120	2,000	6,967	7,855	10,150	2,500	7,580
3,575	68,062	4,416	43,227	7,833	5,000	7,115	10,164	2,000	6,784	7,894	10,206	2,500	7,495
4,006	67,481	3,993	43,244	5,921	5,000	7,088	10,125	2,000	6,855	7,860	10,157	2,500	7,568
4,454	67,930	3,284	44,267	5,103	5,000	7,075	10,107	2,000	6,966	7,844	10,134	2,500	7,585
4,844	71,584	3,552	46,557	5,566	5,000	7,078	10,111	2,000	6,861	7,847	10,139	2,500	7,579
5,364	76,257	4,195	49,185	6,728	5,000	7,088	10,126	2,000	6,842	7,860	10,158	2,500	7,557
5,751	77,690	3,822	50,561	8,352	5,000	7,108	10,154	2,000	6,762	7,884	10,192	2,500	7,492
6,141	79,503	5,296	50,356	9,409	5,297	7,118	10,169	2,000	6,779	8,323	10,211	2,500	7,847
6,501	71,376	4,448	45,515	9,826	5,668	7,138	10,197	2,000	6,707	8,980	10,246	2,500	8,219
7,159	75,351	5,328	47,418	11,633	6,083	7,154	10,221	2,000	6,682	9,501	10,276	2,500	8,663
7,610	69,508	6,589	42,067	11,849	6,341	7,171	10,244	2,000	6,704	9,898	10,304	2,500	8,931
8,130	71,450	5,991	44,124	11,515	6,673	7,161	10,230	2,000	6,696	10,361	10,288	2,500	9,337
8,538	70,197	6,008	43,130	13,261	6,987	7,189	10,270	2,000	6,527	10,862	10,337	2,500	9,587
8,996	65,901	5,593	40,538	12,325	7,234	7,187	10,267	2,000	6,630	11,216	10,334	2,500	9,875
9,501	68,694	7,472	40,614	14,919	7,588	7,217	10,310	2,000	6,616	11,785	10,388	2,500	10,150
10,065	65,344	7,137	38,604	12,278	7,944	7,188	10,268	2,000	6,696	12,295	10,336	2,500	10,672
10,859	64,648	6,366	38,888	13,995	8,448	7,217	10,309	2,000	6,589	13,034	10,387	2,500	11,102
11,301	62,062	8,210	35,233	15,792	8,760	7,254	10,364	2,000	6,587	13,571	10,454	2,500	11,242
11,634	63,303	8,084	36,018	15,608	8,969	7,248	10,354	2,000	6,593	13,862	10,442	2,500	11,498

Time: 4:17:43 p.m. Apr. 17, 1987

Exhibit II-5

ONTARIO DEATH BENEFITS

Data Source: Revenue Canada Taxation Statistics, 1984 Taxation Year, Table 2, All Personal Returns by Total Income, Ontario only.

Data Description: All Returns including those with $0 Employment Income. Gross Income from Employment taken as Wages and Salaries Income adjusted for other Sources of Employment Income (Commissions from Employment, other Employment Income, and Net Business, Professional, Commission, Farming, and Fishing Income), adjusted to 1987 Income Levels (trended at 4.5% per annum).

Unit Benefit: 90% of Annual Net Income, subject to a Minimum of $5,000 and a Maximum of $31,307. Annual Net Income approximated from adjusted Gross Income from Employment by Deduction of C.P.P. Tax, U.I.C. Tax, and Income Tax at 1987 Levels. Income Tax calculated assuming no Income other than Income form Employment, and assuming no Deductions other than Employment Expense Deduction, Basic Personal Exemption, and displayed number of Dependant Married and Child Exemptions.

Analysis: Discrete Approximation based on a 74 interval partition of Tax Return Total Income. Number of Other Spouses taken as 70% of Column [2], less Column [3]. 90% Net Income Capped at $600 per Week.

Current Benefits: House Head or Spouse Death: $10,000 (1st Survivor) + $1,000 (each other dependant Survivor);
Dependant Non-Spouse Death: $2,000

Proposed Benefits: House Head or Spouse Death: 200% of Unit Benefit (1st Survivor) + 25% of Unit Benefit (each other dependant Survivor);
Death of Person without Spouse or Dependants: $2,500

						Average Current Benefit per Claimant				Average Proposed Benefit per Claimant			
100% Ann. Gross Wage	Number Earning	# Dependt Spouses	# Other Spouses	# Dependt Children	New Unit Benefit	Wage Earner	Dependant Spouse	Dependant Child	Total	Wage Earner	Dependant Spouse	Dependant Child	Total
12,206	63,382	7,102	37,055	14,500	9,305	7,230	10,328	2,000	6,594	14,312	10,410	2,500	11,962
12,908	64,253	7,177	37,900	17,699	9,753	7,275	10,394	2,000	6,479	15,076	10,492	2,500	12,209
13,668	61,607	6,890	36,235	15,692	10,225	7,255	10,364	2,000	6,530	15,716	10,455	2,500	12,822
13,978	63,437	7,316	37,090	17,179	10,433	7,271	10,387	2,000	6,500	16,063	10,494	2,500	12,949
14,591	61,633	8,395	34,748	18,396	10,833	7,298	10,426	2,000	6,493	16,725	10,533	2,500	13,177
15,390	62,242	7,028	36,541	15,402	11,289	7,247	10,354	2,000	6,551	17,253	10,442	2,500	14,004
15,949	63,731	9,134	35,478	20,049	11,670	7,315	10,449	2,000	6,476	18,006	10,562	2,500	13,928
16,273	63,882	8,777	35,940	19,830	11,870	7,310	10,443	2,000	6,469	18,269	10,554	2,500	14,170
16,982	61,322	8,868	34,057	19,346	12,307	7,315	10,451	2,000	6,477	18,950	10,563	2,500	14,565
17,581	63,393	8,370	36,005	20,463	12,666	7,323	10,461	2,000	6,427	19,504	10,576	2,500	14,921
18,272	60,918	8,040	34,603	22,022	13,095	7,362	10,516	2,000	6,343	20,267	10,646	2,500	15,116
18,714	62,678	9,589	34,286	24,087	13,388	7,384	10,549	2,000	6,353	20,780	10,686	2,500	15,206
19,376	60,666	9,907	32,559	24,318	13,809	7,401	10,573	2,000	6,348	21,466	10,716	2,500	15,483
19,759	63,476	8,734	35,699	21,248	14,013	7,335	10,478	2,000	6,416	21,541	10,598	2,500	16,189
20,524	58,022	9,163	31,452	22,777	14,506	7,392	10,561	2,000	6,350	22,482	10,701	2,500	16,223
21,105	57,810	7,984	32,483	26,070	14,844	7,451	10,544	2,000	6,182	23,205	10,805	2,500	16,252
21,443	58,473	9,817	31,114	26,444	15,078	7,452	10,646	2,000	6,261	23,564	10,808	2,500	16,362
21,972	52,747	8,745	28,178	24,827	15,399	7,471	10,572	2,000	6,222	24,121	10,840	2,500	16,557
22,713	52,258	9,282	27,299	26,858	15,860	7,514	10,734	2,000	6,177	24,992	10,918	2,500	16,680
22,971	49,882	8,413	26,504	26,880	16,012	7,539	10,770	2,000	6,110	25,324	10,962	2,500	16,702
23,837	52,618	9,472	27,501	27,356	16,538	7,518	10,740	2,000	6,175	26,045	10,925	2,500	17,262
24,105	51,912	9,049	27,289	31,097	16,702	7,599	10,856	2,000	6,028	26,634	11,070	2,500	16,952
24,642	49,356	10,165	24,384	28,757	17,062	7,583	10,832	2,000	6,138	27,122	11,040	2,500	17,249
25,092	50,686	8,973	26,507	32,251	17,312	7,636	10,909	2,000	5,978	27,741	11,136	2,500	17,263
25,841	48,490	9,587	24,356	27,997	17,774	7,577	10,825	2,000	6,125	28,199	11,031	2,500	17,928

Time: 4:17:46 p.m. Apr. 17, 1987

ONTARIO DEATH BENEFITS

Exhibit II-6

Data Source: Revenue Canada Taxation Statistics, 1984 Taxation Year, Table 2, All Personal Returns by Total Income, Ontario only.

Data Description: All Returns including those with $0 Employment Income. Gross Income from Employment taken as Wages and Salaries Income adjusted for other Sources of Employment Income (Commissions from Employment, other Employment Income, and Net Business, Professional, Commission, Farming, and Fishing Income), adjusted to 1987 Income Levels (trended at 4.5% per annum).

Unit Benefit: 90% of Annual Net Income, subject to a Minimum of $5,000 and a Maximum of $31,307. Annual Net Income approximated from adjusted Gross Income from Employment by Deduction of C.P.P. Tax, U.I.C. Tax, and Income Tax at 1987 Levels. Income Tax calculated assuming no Income other than Income form Employment, and assuming no Deductions other than Employment Expense Deduction, Basic Personal Exemption, and displayed number of Dependant Married and Child Exemptions.

Analysis: Discrete Approximation based on a 24 interval partition of Tax Return Total Income. Number of Other Spouses taken as 70% of Column [2], less Column [3]. 90% Net Income Capped at $600 per Week.

Current Benefits: House Head or Spouse Death: $10,000 (1st Survivor) + $1,000 (each other dependant Survivor);
Dependant Non-Spouse Death: $2,000

Proposed Benefits: House Head or Spouse Death: 200% of Unit Benefit (1st Survivor) + 25% of Unit Benefit (each other dependant Survivor);
Death of Person without Spouse or Dependants: $2,500

						Average Current Benefit per Claimant				Average Proposed Benefit per Claimant			
100% Ann. Gross Wage	Number Earning	# Dependt Spouses	# Other Spouses	# Dependt Children	New Unit Benefit	Wage Earner	Dependant Spouse	Dependant Child	Total	Wage Earner	Dependant Spouse	Dependant Child	Total
26,382	95,735	17,059	49,956	58,229	18,407	7,608	10,969	2,000	6,024	29,319	11,086	2,500	18,369
28,271	89,298	18,791	43,711	60,331	19,210	7,676	10,965	2,000	6,010	30,989	11,207	2,500	18,523
29,197	87,027	18,888	42,031	57,033	19,762	7,655	10,936	2,000	6,056	31,655	11,170	2,500	19,076
30,050	85,308	20,133	39,593	64,061	20,301	7,751	11,073	2,000	5,972	32,983	11,341	2,500	18,992
31,617	83,333	20,131	38,202	66,343	21,229	7,796	11,137	2,000	5,928	34,696	11,422	2,500	19,358
32,949	81,727	19,757	37,452	72,114	21,992	7,882	11,261	2,000	5,823	36,390	11,576	2,500	19,498
33,452	75,860	18,566	34,536	65,685	22,270	7,866	11,237	2,000	5,850	36,749	11,546	2,500	19,776
34,557	70,718	18,247	31,256	66,446	22,328	7,940	11,342	2,000	5,900	38,235	11,678	2,500	19,938
35,797	61,472	15,648	27,382	55,656	23,603	7,905	11,293	2,000	5,829	39,136	11,617	2,500	20,536
36,641	60,645	15,396	27,056	52,372	24,065	7,864	11,234	2,000	5,876	39,537	11,542	2,500	21,123
38,968	136,443	39,956	55,554	136,160	25,373	7,998	11,426	2,000	5,823	42,602	11,782	2,500	21,193
41,236	107,481	31,320	43,917	110,004	26,675	8,024	11,462	2,000	5,793	44,920	11,828	2,500	21,999
44,563	164,203	46,783	68,159	178,258	28,552	8,086	11,551	2,000	5,715	48,472	11,939	2,500	23,028
49,218	100,227	31,261	38,898	117,891	30,863	8,176	11,680	2,000	5,696	53,034	12,100	2,500	24,313
54,243	95,318	28,656	38,067	107,882	31,307	8,132	11,617	2,000	5,709	53,438	12,021	2,500	24,618
61,109	40,199	10,886	17,253	42,154	31,307	8,049	11,498	2,000	5,717	52,787	11,873	2,500	25,275
67,745	23,257	5,681	10,399	25,307	31,307	8,088	11,554	2,000	5,633	53,097	11,943	2,500	25,133
72,820	14,237	3,782	6,184	15,826	31,307	8,112	11,588	2,000	5,642	53,281	11,985	2,500	24,921
75,942	9,686	2,112	4,668	9,424	31,307	7,973	11,390	2,000	5,661	52,194	11,737	2,500	26,100
90,548	14,475	3,410	6,723	16,217	31,307	8,121	11,600	2,000	5,558	53,351	12,001	2,500	25,034
110,624	8,084	1,958	3,709	10,382	31,307	8,285	11,835	2,000	5,428	54,633	12,293	2,500	24,078
134,759	7,480	1,264	3,972	8,604	31,307	8,150	11,643	2,000	5,354	53,583	12,054	2,500	25,222
165,749	3,151	411	1,795	3,274	31,307	8,040	11,484	2,000	5,354	52,718	11,855	2,500	26,210
368,722	5,310	658	3,059	4,741	31,307	7,893	11,275	2,000	5,492	51,568	11,594	2,500	27,389
Total over all Wages:													
17,944	5,636,798	872,549	3,073,208	2,554,649	1,131,035	7,453	10,857	2,000	6,244	20,833	11,071	2,500	14,726

Time: 4:17:51 p.m. Apr. 17, 1987

Exhibit II-7

(D) Disability Income Coverage

Current:	- Wage earner: minimum of $140 and (80% of gross weekly, less offsets). - Principal unpaid non-employed housekeeper: flat $70 per week, maximum 12 weeks. - Others: no benefits. - Offsets: All government plans and employer STD and LTD plans in total. Pro rata share of any individual disability plans (except no offsets for first 14 days, except for employer plans). - Definition of Disabiity: substantial inability to perform essential duties of own occupation, up to 104 weeks. Unable to engage in any reasonably suited occupation after 104 weeks.
Proposed:	- Wage earner: 90% of 'Net Income From Employment', maximum $600 per week, less offsets, payable to age 65. - All persons: Indemnity for reasonably provable expenses for ordinary essential services performed, maximum $200 per week per household for up to 3 years. - Children up to high school: 90% of 'Net Income' corresponding to gross income at 75% of average industrial wage, payable from age 18 to age 65. - Post secondary students: 90% of 'Net Income' corresponding to gross income at 100% of average industrial wage (or higher if demonstrable) payable from expected date of graduation to 65. - Net income: gross less U.I.C. tax, C.P.P. tax, Income tax. - Offsets: as current + actual or imputed (after 104 weeks) continuing employment income for persons unable to engage in own occupation, but able to return to a lower paying job). All taxable offsets to be reduced to a net income equivalent. - Definition of Disability: Unable to perform own job. - Indexing: at 60% of annual C.P.I. change, not to exceed 6%.

Exhibit II-8

(D) Disability Income Coverage

Assumptions:

1. The change in definition of disability will not increase the proportion of long-term claimants materially. (Quebec uses the proposed definition up to 5 years - see duration of disability table).
2. Full 'replacement services' costs of $200 per week for up to 3 years will be claimed by 50% of all persons who are not dependant children.
3. An investment interest rate of 8% per annum is appropriate, reduced to 5% for indexed benefits.
4. The average age of a disabled wage earner is 35. (Ontario accident facts indicates the average age of all B.I. victims to be about 32). The average age of a child under 18 is 8. The average age of a student over 18 is 20.
5. The average wage for all wage earners (see Ontario wage table) is a reasonable surrogate for the average industrial wage.
6. The average offset for both current and proposed is 10%.

   Compare: Current versus proposed average weekly benefits for wage earners (see wage table following).

Offset %	0	10	20	30	40
Current	122.07	119.08	115.38	110.47	103.60
Proposed	272.80	242.48	212.17	181.87	151.55
Ratio	2.23	2.04	1.84	1.65	1.46

   (e.g. at 10%: current = .70 x 100% of gross
   capped average at $\frac{140}{.70}$ = .70 x 170.11 = 119.08
   proposed= $\frac{.80}{.90}$ x 90% net
   capped average at 600 = $\frac{8}{9}$ x 272.20 = 242.48)

7. There will be, in addition, a further 15% frequency increase.

Exhibit II-9

(D) Disability Income Coverage

Proposed vs. Current

Category	Current No. of Persons (000)	Current Adjusted Weekly Benefit	Adjusted Proposed No. of Persons (000)	Proposed Adjusted Weekly Benefit
Wages	4,613	119.08	4,613	242.48
Replacement Services	873	17.15	3,255	99.65
Children under 18			1,458	92.18
Students over 18			250	208.52
Total	5,486	102.86	9,576	170.16

Notes:

1. Number of persons - see Death Benefit Table (Children under 18 from Statistics Canada) = 2430, reduced by 40% to reflect relative reduced exposure; students over 18 at 2550 - 2430 = 125, doubled to reflect increased relative exposure).

2. Adjusted Current Replacement Services $= \frac{8\%\ \text{T.P.V.}\ (.25)}{8\%\ \text{T.P.V.}\ (30)} \times 70$

$$= \frac{5.84}{23.83} \times 70 = 17.15$$

(see Duration table following)
(T.P.V. = Truncated Present Value)

3. Adjusted Proposed Replacement Services $= \frac{5\%\ \text{T.P.V.}\ (3)}{5\%\ \text{T.P.V.}\ (30)} \times 200$

$$= \frac{14.09}{28.28} \times 200 = 99.65$$

4. Adjusted proposed children under 18 $= .75 \times 90\%$ net for gross of $420.19 \times \frac{5\%\ \text{T.P.V.}\ (57) - 5\%\ \text{T.P.V.}\ (10)}{5\%\ \text{T.P.V.}\ (30)}$

$$= .75 \times 294.57 \times \frac{31.90 - 20.10}{28.28}$$

$$= 92.18$$

(see Wage Table following)

Exhibit II-10

(D) Disability Income Coverage

Notes:

5. Adjusted Students over 18

$$\begin{aligned}
&= (1.00 \text{ x } 90\% \text{ net for gross of } 420.19 \\
&\quad + \text{Portion with gross over } 420.19 \\
&\quad \text{x } (90\% \text{ Net Capped (Infinity)} \\
&\quad - 90\% \text{ net capped } (420.19))) \\
&\quad \text{x } \frac{5\% \text{ T.P.V. } (45) - 5\% \text{ T.P.V. } (2)}{5\% \text{ T.P.V. } (30)} \\
&= (294.57 + .4077 \text{ x } (282.80 - 211.04)) \text{ x } \frac{30.85 - 12.64}{28.28} \\
&= 208.52
\end{aligned}$$

Adjustment Factor

$$\text{Indexing Adjustment} = \frac{5\% \text{ T.P.V. } (30)}{8\% \text{ T.P.V. } (30)} = \frac{28.28}{23.83} = 1.187$$

$$\text{Final Adjustment} = 1.15 \text{ x } \frac{170.16}{102.86} \text{ x } \frac{9576}{5486} \text{ x } 1.187 = 3.94$$

Exhibit II-11

ONTARIO DURATION OF DISABILITY

Incomplete Expected Present Value of a Continuous Annuity at a Rate of $1 per week with Payout truncated at Listed Duration. Duration of Disability Based on Quebec Experience for Accident Year 1978 adjusted to add 50% more Claimants with Duration less than one week in recognition of the seven day deductible in force in Quebec, and extended assuming no recovery after a duration of Seven Years.

Duration of Disability in Years	% who exceed Duration	Present Value (Truncated at Duration) at Effective Annual % Interest Rate of 0.00	3.00	4.00	5.00	8.00	10.00
0.000	100.0	0.00	0.00	0.00	0.00	0.00	0.00
0.019	66.7	0.83	0.83	0.83	0.83	0.83	0.83
0.083	48.7	2.75	2.75	2.75	2.75	2.75	2.74
0.250	23.3	5.89	5.97	5.87	5.86	5.84	5.83
0.500	12.7	8.24	8.20	8.18	8.17	8.13	8.10
1.000	6.0	10.68	10.58	10.55	10.52	10.44	10.38
1.500	4.0	11.98	11.84	11.80	11.75	11.62	11.54
2.000	3.4	12.95	12.76	12.70	12.64	12.47	12.36
3.000	2.9	14.59	14.29	14.19	14.09	13.82	13.65
4.000	2.6	16.03	15.58	15.44	15.30	14.92	14.68
5.000	2.4	17.33	16.72	16.53	16.35	15.84	15.53
6.000	2.1	18.50	17.72	17.48	17.25	16.61	16.23
7.000	2.0	19.57	18.60	18.31	18.03	17.26	16.81
10.000	2.0	22.70	21.04	20.55	20.10	18.89	18.20
12.500	2.0	25.31	22.91	22.23	21.61	19.99	19.10
15.000	2.0	27.92	24.65	23.75	22.94	20.90	19.80
17.500	2.0	30.53	26.26	25.13	24.12	21.65	20.36
20.000	2.0	33.14	27.76	26.39	25.17	22.27	20.80
25.000	2.0	38.36	30.45	28.55	26.91	23.20	21.41
30.000	2.0	43.58	32.76	30.33	28.28	23.83	21.80
35.000	2.0	48.79	34.76	31.79	29.35	24.26	22.04
40.000	2.0	54.01	36.49	32.99	30.19	24.55	22.18
45.000	2.0	59.23	37.97	33.97	30.85	24.75	22.27
50.000	2.0	64.45	39.26	34.79	31.37	24.89	22.33
55.000	2.0	69.67	40.36	35.45	31.77	24.98	22.37
60.000	2.0	74.88	41.32	36.00	32.09	25.04	22.39
65.000	2.0	80.10	42.14	36.45	32.33	25.08	22.40

TIME: 4:05:38 p.m. Apr. 17, 1987

Exhibit II-12

1987 ONTARIO WAGE DISTRIBUTION

Data Source: Revenue Canada Taxation Statistics, 1984 Taxation Year, Table 2, All Personal Returns by Total Income, Ontario only.

Data Description: All Returns with Employment Income greater than $0. Gross Income from Employment taken as Wages and Salaries Income adjusted for other Sources of Employment Income (Commissions from Employment, other Employment Income, and Net Business, Professional, Commission, Farming, and Fishing Income), adjusted to 1987 Income Levels (trended at 4.5% per annum).

Net Income: Approximated from adjusted Gross Income from Employment by Deduction of C.P.P. Tax, U.I.C. Tax, and Income Tax at 1987 Levels. Income Tax calculated assuming no Income other than Income from Employment, and assuming no Deductions other than Employment Expense Deduction, Basic Personal Exemption, and displayed average number of Dependant Married and Child Exemptions.

Analysis: Discrete Approximation based on a 73 interval partition of Tax Return Total Income.

100 % Gross Income from Employment (See the comments above for source)						On 100% of Gross Basis		On 90% of Gross Basis		On 90% of Net Basis	
Weekly ($) Wage Level	Number at Wage Level	Avg # Full Exmp-Spouse	Avg # Full Exmp-Child	Percent at Wage Level	% above Wage Level	Weekly ($) Wage Level	Avg Capped at Level	Weekly ($) Wage Level	Avg Capped at Level	Weekly ($) Wage Level	Avg Capped at Level
0.00	0	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
12.59	76,285	0.16	0.25	1.65	98.35	12.59	12.59	10.07	10.07	11.07	11.07
25.06	53,581	0.11	0.38	1.16	97.19	25.06	24.85	20.05	19.88	22.02	21.84
34.41	54,731	0.07	0.18	1.19	96.00	34.41	33.94	27.53	27.15	30.24	29.83
42.94	62,204	0.05	0.13	1.35	94.65	42.94	42.13	34.35	33.70	37.73	37.02
51.75	62,954	0.06	0.12	1.36	93.29	51.75	50.47	41.40	40.37	45.42	44.30
60.87	68,193	0.06	0.08	1.48	91.81	60.87	58.98	48.70	47.18	53.29	51.63
68.51	68,062	0.06	0.12	1.48	90.33	68.51	65.99	54.81	52.79	59.98	57.69
76.77	67,481	0.06	0.09	1.46	88.87	76.77	73.45	61.42	58.76	67.01	64.13
85.35	67,930	0.05	0.08	1.47	87.40	85.35	81.08	68.28	64.86	74.40	70.70
92.93	71,584	0.05	0.08	1.55	85.85	92.93	87.61	74.25	70.09	80.86	76.34
102.80	76,257	0.06	0.09	1.65	84.19	102.80	96.17	82.24	76.94	89.38	83.56
110.22	77,690	0.05	0.11	1.68	82.51	110.22	102.42	88.18	81.94	95.39	88.72
117.68	79,503	0.07	0.12	1.72	80.79	117.68	108.57	94.14	86.86	101.50	93.76
126.51	71,376	0.06	0.14	1.55	79.24	126.51	115.71	101.21	92.57	108.63	99.52
137.20	75,351	0.07	0.15	1.63	77.60	137.20	124.18	109.76	99.34	116.58	105.82
145.85	69,508	0.09	0.17	1.51	76.10	145.85	130.89	116.68	104.71	121.54	109.67
155.81	71,450	0.08	0.16	1.55	74.55	155.81	138.47	124.65	110.78	127.88	114.49
164.79	70,197	0.09	0.19	1.52	73.03	164.79	145.17	131.83	116.13	133.91	118.99
172.41	65,901	0.08	0.19	1.43	71.60	172.41	150.73	137.93	120.59	138.64	122.44
182.10	68,694	0.11	0.22	1.49	70.11	182.10	157.67	145.68	126.13	145.43	127.30
192.89	65,344	0.11	0.19	1.42	68.69	192.89	165.23	154.31	132.19	152.25	132.08
208.12	64,648	0.10	0.22	1.40	67.29	208.12	175.69	166.50	140.56	161.92	138.73
216.59	62,062	0.13	0.25	1.35	65.95	216.59	181.39	173.27	145.11	167.87	142.73
222.97	63,303	0.13	0.25	1.37	64.58	222.97	185.60	178.38	148.48	171.89	145.38

Time: 4:09:26 p.m. Apr. 17, 1987

Exhibit II-13

1987 ONTARIO WAGE DISTRIBUTION

Data Source: Revenue Canada Taxation Statistics, 1984 Taxation Year, Table 2, All Personal Returns by Total Income, Ontario only.

Data Description: All Returns with Employment Income greater than $0. Gross Income from Employment taken as Wages and Salaries Income adjusted for other Sources of Employment Income (Commissions from Employment, other Employment Income, and Net Business, Professional, Commission, Farming, and Fishing Income), adjusted to 1987 Income Levels (trended at 4.5% per annum).

Net Income: Approximated from adjusted Gross Income from Employment by Deduction of C.P.P. Tax, U.I.C. Tax, and Income Tax at 1987 Levels. Income Tax calculated assuming no Income other than Income from Employment, and assuming no Deductions other than Employment Expense Deduction, Basic Personal Exemption, and displayed average number of Dependant Married and Child Exemptions.

Analysis: Discrete Approximation based on a 73 interval partition of Tax Return Total Income.

100 % Gross Income from Employment (See the comments above for source)						On 100% of Gross Basis		On 80% of Gross Basis		On 90% of Net Basis	
Weekly ($) Wage Level	Number at Wage Level	Avg # Full Exmp-Spouse	Avg # Full Exmp-Child	Percent at Wage Level	% above Wage Level	Weekly ($) Wage Level	Avg Capped at Level	Weekly ($) Wage Level	Avg Capped at Level	Weekly ($) Wage Level	Avg Capped at Level
233.93	63,082	0.11	0.23	1.37	63.21	233.93	192.68	187.14	154.14	178.33	149.54
247.39	64,253	0.11	0.28	1.39	61.82	247.39	201.19	197.91	160.95	186.91	154.96
261.94	61,607	0.11	0.25	1.34	60.49	261.94	210.18	209.55	168.15	195.95	160.55
267.88	63,437	0.12	0.27	1.38	59.11	267.88	213.78	214.30	171.02	199.94	162.97
279.63	61,633	0.14	0.30	1.34	57.78	279.63	220.72	223.70	176.58	207.65	167.52
294.94	62,242	0.11	0.25	1.35	56.43	294.94	229.57	235.95	183.65	216.34	172.54
305.66	63,731	0.14	0.31	1.38	55.04	305.66	235.62	244.53	188.49	223.66	176.67
311.88	63,882	0.14	0.31	1.38	53.66	311.88	239.04	249.50	191.23	227.50	178.79
325.46	61,322	0.14	0.32	1.33	52.33	325.46	246.33	260.37	197.06	235.86	183.27
336.93	63,393	0.13	0.32	1.37	50.96	336.93	252.33	269.54	201.86	242.73	186.87
350.17	60,918	0.13	0.36	1.32	49.64	350.17	259.08	280.14	207.26	250.95	191.06
358.66	62,678	0.15	0.38	1.36	48.28	358.66	263.29	286.93	210.63	256.59	193.86
371.35	60,666	0.16	0.40	1.31	46.96	371.35	269.42	297.08	215.53	264.65	197.75
378.68	63,476	0.14	0.33	1.38	45.59	378.68	272.86	302.94	218.29	268.56	199.58
393.33	58,022	0.16	0.39	1.26	44.33	393.33	279.54	314.66	223.63	278.00	203.89
404.48	57,810	0.14	0.45	1.25	43.08	404.48	284.48	323.58	227.58	284.48	206.76
410.96	58,473	0.17	0.45	1.27	41.81	410.96	287.27	328.77	229.82	288.97	208.70
421.09	52,747	0.17	0.47	1.14	40.67	421.09	291.51	336.87	233.20	295.12	211.27
435.29	52,258	0.18	0.51	1.13	39.53	435.29	297.28	348.23	237.82	303.95	214.86
440.25	49,882	0.17	0.54	1.08	38.45	440.25	299.24	352.20	239.39	306.88	216.02
456.84	52,818	0.18	0.52	1.14	37.31	456.84	305.62	365.47	244.50	316.96	219.89
461.97	51,912	0.17	0.60	1.13	36.18	461.97	307.54	369.58	246.03	320.10	221.06
472.26	49,356	0.21	0.58	1.07	35.11	472.26	311.26	377.81	249.01	326.99	223.56
480.89	50,686	0.18	0.64	1.10	34.01	480.89	314.29	384.71	251.43	331.78	225.24
495.23	48,490	0.20	0.58	1.05	32.96	495.23	319.17	396.18	255.33	340.63	228.25

Time: 4:09:29 p.m. Apr. 17, 1987

Exhibit II-14

1987 ONTARIO WAGE DISTRIBUTION

Data Source: Revenue Canada Taxation Statistics, 1984 Taxation Year, Table 2, All Personal Returns by Total Income, Ontario only.

Data Description: All Returns with Employment Income greater than $0. Gross Income from Employment taken as Wages and Salaries Income adjusted for other Sources of Employment Income (Commissions from Employment, other Employment Income, and Net Business, Professional, Commission, Farming, and Fishing Income), adjusted to 1987 Income Levels (trended at 4.5% per annum).

Net Income: Approximated from adjusted Gross Income from Employment by Deduction of C.P.P. Tax, U.I.C. Tax, and Income Tax at 1987 Levels. Income Tax calculated assuming no Income other than Income from Employment, and assuming no Deductions other than Employment Expense Deduction, Basic Personal Exemption, and displayed average number of Dependant Married and Child Exemptions.

Analysis: Discrete Approximation based on a 73 interval partition of Tax Return Total Income.

100 % Gross Income from Employment (See the comments above for source)						On 100% of Gross Basis		On 80% of Gross Basis		On 90% of Net Basis	
Weekly ($) Wage Level	Number at Wage Level	Avg # Full Exmp-Spouse	Avg # Full Exmp-Child	Percent at Wage Level	% above Wage Level	Weekly ($) Wage Level	Avg Capped at Level	Weekly ($) Wage Level	Avg Capped at Level	Weekly ($) Wage Level	Avg Capped at Level
517.11	95,735	0.18	0.61	2.08	30.89	517.11	326.38	413.69	261.10	352.77	232.25
541.82	89,288	0.21	0.68	1.94	28.95	541.82	334.01	433.46	267.21	368.16	237.00
559.57	87,027	0.22	0.66	1.89	27.06	559.57	339.15	447.66	271.32	378.72	240.06
575.92	85,308	0.24	0.75	1.85	25.22	575.92	343.57	460.74	274.86	389.07	242.86
605.93	83,353	0.24	0.80	1.81	23.41	605.93	351.14	484.74	280.91	406.85	247.34
631.47	81,727	0.24	0.88	1.77	21.64	631.47	357.12	505.18	285.70	421.47	250.77
641.10	75,860	0.24	0.87	1.64	19.99	641.10	359.20	512.88	287.36	426.82	251.92
662.28	70,718	0.26	0.94	1.53	18.46	662.28	363.44	529.82	290.75	439.42	254.44
686.05	61,472	0.25	0.91	1.33	17.13	686.05	367.83	548.84	294.26	452.34	256.65
702.21	60,645	0.25	0.86	1.31	15.81	702.21	370.59	561.77	296.48	461.19	258.34
744.91	136,443	0.29	1.00	2.96	12.86	744.91	377.35	595.93	301.88	486.27	262.31
790.28	107,481	0.29	1.02	2.33	10.53	790.28	383.18	632.22	306.54	511.22	265.52
855.97	164,203	0.28	1.09	3.56	6.97	855.97	390.09	684.78	312.08	547.20	269.31
943.26	100,227	0.31	1.18	2.17	4.79	943.26	396.18	754.61	316.94	591.48	272.39
1,039.57	95,318	0.30	1.13	2.07	2.73	1,039.57	400.79	831.66	320.64	636.80	274.56
1,171.16	40,199	0.27	1.05	0.87	1.86	1,171.16	404.38	936.93	323.51	697.79	276.23
1,298.33	23,257	0.25	1.09	0.50	1.35	1,298.33	406.75	1,038.66	325.40	757.57	277.34
1,395.60	14,237	0.27	1.11	0.31	1.04	1,395.60	408.06	1,116.48	326.45	803.20	277.96
1,455.42	9,686	0.22	0.97	0.21	0.83	1,455.42	408.69	1,164.34	326.95	824.63	278.18
1,735.34	14,475	0.24	1.12	0.31	0.52	1,735.34	411.02	1,388.27	328.82	938.45	279.13
2,120.11	8,084	0.24	1.28	0.18	0.35	2,120.11	413.03	1,696.09	330.42	1,093.70	279.94
2,582.66	7,480	0.17	1.15	0.16	0.18	2,582.66	414.63	2,066.13	331.70	1,276.02	280.57
3,176.57	3,151	0.13	1.04	0.07	0.12	3,176.57	415.71	2,541.26	332.57	1,512.26	281.00
7,066.53	5,310	0.12	0.89	0.12	0.00	7,066.53	420.19	5,653.22	336.15	3,071.84	282.80

Time: 4:09:32 p.m. Apr. 17, 1987

Exhibit II-15

(E) Quebec Excess (Part III)

Current:	Ontario resident injured in Quebec receives any excess of REGIE benefits over Ontario Accident Benefits.
Proposed:	No change (but proposed Ontario Accident Benefits are richer).
Assumptions:	Proposed Ontario Benefits are roughly comparable to Quebec REGIE except for the REGIE's 'meat chart' and death benefits, which items represent about 1/3 of REGIE's payout.
Adjustment Factor:	0.30

Exhibit II-16

(F) Uninsured Motorist Coverage

Current:	B.I. (including death) from uninsured or unidentified and P.D. (layer from $100 to $25,100) from identified uninsured, up to minimum limits in the accident jurisdiction.
Proposed:	No change.
Assumptions:	There will be a 40% offset to current costs to reflect savings related to economic loss for B.I. from the proposed increases in Funeral, Medical + Rehabilitation, Death, and Disability Income benefits.

Exhibit II-17

(G) Bodily Injury

Proposed:

Same as current except that tort will be restricted to cases where:

a. There is an excess economic loss after consideration of benefits payable under the proposed auto policy and all collateral sources.
b. There is death or permanent and serious injury.

A tort action based on "a." only may address economic loss only.

Assumptions:

1. The other features of the proposed plan, together with collateral benefits, will indemify all economic loss except for the high income layer of those individuals with very high income from employment, some of whom will have potential tort action based on death or serious and permanent injury.
2. The 1987 Ontario Wage Table (see Disability Income Analysis) indicates that about 4.4% of wage earners will bump into the $600 cap on 90% net weekly wage, and that their disability income under the proposal will be deficient by about

   $$\frac{\$282.80 - \$272.50}{.044}$$

   = $227.27 per week.

   Wage earners make up about

   $$\frac{5{,}637 - 1{,}023}{5{,}637 + 873 + 2{,}555} \times 100\%$$

   = 51% of the population. (See Death Benefit Analysis Table)

3. The American Study 'Compensating Automobile Accident Victims' (U.S. Department of Transport, May, 1985) indicates on page 19 that about 6.0% of bodily injury claims are for serious, severe, critical and fatal cases. Mr. J. Cheng (Canadian Underwriter, February 1987, page 38) indicates that 7% of B.I. claims and 55% of B.I. Loss dollars are associated with permanent and serious injury.

Exhibit II-18

(G) Bodily Injury

4. We will assume that the top 8% of B.I. claims will remain in tort and that the tort system will remain unchanged relative to these claims. This corresponds to 56.2% of the B.I. Loss dollars remaining in Tort, based on the 1983 F.P.Y. size-of-loss distributon for B.I. at the 54 month development level (see Table following).
5. Claims close in increasing order of ultimate severity.

Adjustments: 56.2% of B.I. L + ALAE remains.

43.8% of B.I. L + ALAE is eliminated, all of it closed prior to 54 months for a F.P.Y. (or 48 months for an accident year) (see Exhibit IV).

LDF 48 to ultimate on an accident year = 1.088 (See Appendix A).

% of ultimate B.I. Loss + ALAE remaining =

$$100 - \frac{43.8}{100 \times 1.088} = 59.7$$

Present value factor for 41.6% eliminated.

$$= \frac{4.59 + 15.02 + 18.53 \times .82}{4.84 + 16.90 + 22.56 \times .82} = .8649$$

(see Exhibit IV)

Preliminary indications from the I.B.C. Ontario B.I. Claims Survey indicate that the upper layer of B.I. remaining in tort might be appropriately reduced by about 25% to reflect savings related to economic loss from the proposed increases in accident benefits coverage.

INSURANCE BUREAU OF CANADA
Ontario Private Passenger Automobile (ex. Farmers)
Third Party Liability Bodily Injury (and Passenger Hazard)
Adjusted Raw Incurred Size of Loss Distribution

for

1983 Fiscal Policy Year at 54 Months (December 31, 1986)

Pure Loss Range Floor	Number of Claims	Amount of Pure Loss	Amount of ALAE	Amount of Loss+ALAE	Number over Floor		Loss+ALAE over Floor	
					Number	Per Cent	Dollars	Per Cent
1	4,556	5,030,345	2,642,043	7,672,388	32,085	100.0	507,010,440	100.0
1,001	4,476	6,502,843	1,335,442	7,838,285	27,529	85.8	499,338,052	98.5
2,001	3,002	7,310,595	1,035,481	8,346,076	23,053	71.8	491,499,767	96.9
3,001	2,379	8,069,216	938,189	9,007,405	20,051	62.5	483,153,691	95.3
4,001	2,110	9,289,105	1,010,661	10,299,766	17,672	55.1	474,146,286	93.5
5,001	3,520	20,936,933	2,058,569	22,995,502	15,562	48.5	463,846,520	91.5
7,501	2,517	21,280,315	1,831,016	23,111,331	12,042	37.5	440,851,018	87.0
10,001	2,891	34,275,724	2,640,360	36,916,084	9,525	29.7	417,739,687	82.4
15,001	1,637	27,572,934	2,002,434	29,575,368	6,634	20.7	380,823,603	75.1
20,001	1,106	24,022,978	1,680,455	25,703,433	4,997	15.6	351,248,235	69.3
25,001	1,324	38,602,736	2,118,077	40,720,813	3,891	12.1	325,544,802	64.2
36,631	99	2,886,458	158,376	3,044,834	2,567	8.0	284,823,989	56.2
37,501	745	31,105,012	1,799,676	32,904,688	2,468	7.7	281,779,155	55.6
50,001	985	66,784,524	3,144,370	69,928,894	1,723	5.4	248,874,467	49.1
100,001	424	57,111,838	2,388,036	59,499,874	738	2.3	178,945,573	35.3
200,001	145	33,466,340	1,140,483	34,606,823	314	1.0	119,445,699	23.6
300,001	112	40,708,501	1,443,354	42,151,855	169	0.5	84,838,876	16.7
500,001	49	29,322,859	498,175	29,821,034	57	0.2	42,687,021	8.4
1,000,001	8	12,783,605	82,382	12,865,987	8	0.0	12,865,987	2.5

Note: 1) Row with Column [7] = 8.0 and the Row immediately above obtained
by Linear Inerpolation from original Row above

Time: 5:53:44 p.m. Apr. 10, 1987

Exhibit II-20

(H) Property Damage Coverage

Proposed:	No change from current.
Assumptions:	1.00

Exhibit II-21

(H) OHIP

Current:	2.4% of Third Party Liability Premium.
Assumptions:	1. OHIP agreement will be revised to generate the same revenue from the reduced proposed third party premium and/or accident benefits premium. 2. This amount is payable at the average premium date of the fiscal policy year.
Adjustment Factor:	1.00

Note:

See Calculation for estimated 1987 F.P.Y. Loss Cost Following.

Exhibit II-22

OHIP AGREEMENT LOSS COST

INSURANCE BUREAU OF CANADA
Ontario Private Passenger Automobile (ex. Farmers)
Estimated Third Party Average Premium and OHIP Levy

for

1987 Fiscal Policy Year

Fiscal Policy Year [1]	Average Third Party Premium [2]	OHIP Levy [3]
1982	194.89	
1983	212.61	
1984	214.18	
1985	217.80	
1986	277.48	
Calendar Yr 1986-2	332.65	
1987 (Estimated)	349.29	8.38

Notes: 1) Column [2] Data derived from 1986 Green Book, page 15 except 1986-2 Calendar Year Datum from Average Premium Run supporting 1986 Green Book Pure Premium Exhibit.

2) Estimated 1987 FPY Average Premium taken as 1986-2 Calendar Year value plus 5%.

3) OHIP Third Party Premium Tax Rate taken as 2.4%.

4) It is assumed herein that the OHIP Formula will be adjusted in the Proposed Environment to produce the same revenue.

Time: 12:51:55 p.m. Apr. 20, 1987

Exhibit III-1

INSURANCE BUREAU OF CANADA
Ontario Private Passenger Automobile (ex. Farmers)
Coverage and Kind of Loss: Accident Benefits - Funeral
Ultimate Loss and Loss Adjustment Expense

Trend Analysis and Projection of 1987 Fiscal Policy Year Ultimate Loss Cost Per Car-Year Exposed

Fiscal Policy Year [1]	Earned Car-Years of Exposure [2]	Incurred Number of Claims [3]	Ultimate Incurred Loss and LAE [4]	Ultimate Incurred Frequency [5]	Ultimate Incurred Severity [6]	Ultimate Loss Cost per Car-Year [7]	F.P.Y. Weight [8]	Trended 1987 F.P.Y. Level Ultimate Loss Cost per Car-Year [9]
1981	3,461,394	1,668	2,210,851	0.048	1,325	0.64		0.64
1982	3,496,517	1,009	1,338,615	0.029	1,327	0.38		0.38
1983	3,564,108	684	906,608	0.019	1,325	0.25	30	0.25
1984	3,723,956	649	853,062	0.017	1,314	0.23	35	0.23
1985	3,874,593	737	968,731	0.019	1,314	0.25	35	0.25
Latest 5 Year Log-Linear Fit Annual Trend				0.788	0.997	0.786		
Latest 4 Year Log-Linear Fit Annual Trend				0.871	0.996	0.868		
Latest 3 Year Log-Linear Fit Annual Trend				1.000	0.996	0.996		
Latest 2 Year Log-Linear Fit Annual Trend				1.118	1.000	1.118		
Selected Annual Trend Factor				1.000	1.000	1.000		
Projected Ultimate Loss Cost for 1987 F.P.Y.							100	0.24

Notes: 1) Column [2] from 1985 Green Book, page 15
2) Column [3] from Appendix C
3) Column [4] from Appendix D
4) Column [5] = 100 x Column [3]/Column [2]
5) Column [6] = Column [4]/Column [3]
6) Column [7] = Column [4]/Column [2]
7) Column [9] = Column [7] x L. C. Trend ^ Year Difference
8) Projected Ultimate L. C. = .01 x sum of Column [8] x Column [9]
9) Column [3] taken as 125% of Death Benefit Column [3] adjusted for Exposure
10) Column [4] taken as Column [3] x $1225 (AIX System) x ULAE Factor

Time: 3:46:33 p.m. Apr. 17, 1987

APPENDIX V

REGULATORY AND CRIMINAL SANCTIONS FOR UNSAFE DRIVING

Licensing Requirements

Licensing regulation in Ontario is covered by Part III of the Highway Traffic Act (H.T.A.).[1] Having a licence to drive in Ontario is considered a privilege rather than a right.[2]

It is unlawful to drive without a licence[3] or for an owner to allow someone to drive his or her car without a licence.[4] The penalty for driving without a licence is a fine of between $100 and $500.[5] Drivers are required to carry their licences with them and to surrender them for inspection to the police.[6] The requirement to carry an Ontario licence does not apply to non-residents or new residents of Ontario who meet particular requirements.[7]

It is illegal to drive with a licence which has been cancelled, revoked, suspended, is fictitious, or has been fraudulently obtained.[8] A driver cannot lend[9] or borrow[10] a licence and must surrender a revoked or suspended licence.[11]

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[1] H.T.A., R.S.O. 1980, c.198,ss.17-40, as amended.

[2] H.T.A., s.17(a).

[3] H.T.A., s.18(1).

[4] H.T.A., s.18(4).

[5] H.T.A., s.18(10).

[6] H.T.A., s.19(1).

[7] H.T.A., s.20.

It is unlawful to have more than one licence[12] unless the second licence is a learner's permit for a different class, such as that for driving motorcycles.[13]

The driving age in Ontario is 16. No one under the age of 16 can drive on any highway,[14] even on a motor-assisted bicycle (moped),[15] although anyone under 16 is permitted to drive farm machinery off the highway or directly across it.[16] No one may hire a person under 16 to drive on the highway.[17]

It is unlawful to rent a car to someone unless that person has a licence.[18] In order to rent a car, a person must produce a valid Ontario driver's licence.[19]

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[8] H.T.A., s.21(1)(a).

[9] H.T.A., s.21(1)(6).

[10] H.T.A., s.21(1)(c).

[11] H.T.A., s.21(1)(d).

[12] H.T.A., s.21(1)(e).

[13] H.T.A., s.21(2).

[14] H.T.A., s.23(1).

[15] H.T.A., s.24.

[16] H.T.A., s. 23(3).

[17] H.T.A., s.23(2).

A driver's licence can be suspended for the following reasons: conviction for criminal negligence causing death, criminal negligence causing bodily harm, manslaughter with a vehicle, dangerous operation of a motor vehicle, failure to stop at the scene of an accident, operation of a motor vehicle while impaired or with more than 80 milligrams of alcohol in the blood, impaired driving causing bodily harm or death, or failure to provide a blood sample when demanded. On conviction of any of these offences, a driver's licence will be suspended for a minimum of one year on the first conviction, two years on a second and three years on any subsequent conviction.[20] On conviction of any of the above offences, except criminal negligence causing death and manslaughter (with a vehicle, which carry a maximum penalty of life imprisonment, the trial judge may extend a licence suspension by up to three years.[21] On conviction of those offences carrying a maximum penalty of life imprisonment, a trial judge may extend a licence suspension for any period considered desirable for the protection of the public.[22]

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[18] H.T.A., s.25(1).

[19] H.T.A., s.25(3).

[20] H.T.A., s. 26(1).

[21] H.T.A., s.26(3)(a).

[22] H.T.A., s.26(3)(b).

Anyone convicted of the criminal offence of driving while disqualified is subject to a provincially imposed licence suspension of one year on the first conviction and two years on any subsequent conviction.[23] If the driver has been prohibited from driving in Canada under the Criminal Code,[24] the period of suspension will be either the period of provincial suspension or the period of criminal prohibition, whichever is longer.[25] Anyone who has not paid a fine under the Highway Traffic Act[26], the Public Vehicles Act,[27] the Public Commercial Vehicles Act[28] or any of the regulations, may have their licence suspended or denied until that fine is paid. Driving while one's licence has been suspended for a contravention of the statutes referred to above is punishable by a fine of not more than $500.[29]

If a blood test reveals 50 milligrams or more of alcohol in a driver's bloodstream or a driver refuses to provide a breath sample, the driver's licence may be suspended for 12 hours.[30] If there is no one to remove the vehicle from the scene, the police will tow it, store it, and the driver will be charged for the expense.[31]

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[23] H.T.A., s.27(1).

[24] R.S.C. 1970, c.C-34, as amended.

[25] H.T.A., s.27(a).

[26] R.S.O. 1980, c.198.

[27] R.S.O. 1980, c.425.

[28] R.S.O. 1980, c. 407.

[29] H.T.A., s.30(1).

[30] H.T.A., s.30(a)(4).

Any loss or denial of licence may be appealed to the Licence Suspension Appeal Board.[32] The Board's decision may be appealed to a judge of the District Court.[33]

Driving with a suspended licence is punishable, on a first offence by a fine of not less than $250 and not more than $2,000, on a subsequent offence by a fine of $500 to $2,000 and/or in either case, to imprisonment for up to six months.[34] Conviction for driving while suspended may increase the period of suspension by six months.[35]

The Lieutenant Governor in Council has the right to set the classes of vehicles for licence purposes, the type of licence and the content of the driver's examination.[36] There are ten types of licences applicable to various classes of vehicles and drivers. The requirements for obtaining these licences are set out in the regulations to the Highway Traffic Act.[37]

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[31] H.T.A., ss.30 (11),(12).

[32] H.T.A., s. 31.

[33] H.T.A., s.32(3).

[34] H.T.A., ss. 35(1).

[35] H.T.A., ss. 35(3).

[36] H.T.A., ss.18(7).

[37] H.T.A., Reg. 462.

To obtain a licence, the applicant is required to take a driver's examination; if a driver has a general licence from another province or the United States, he or she must surrender the licence and pay the fee for an Ontario licence.[38] The Governor General, the Lieutenant Governor, diplomats or a member of the diplomatic staff with a valid foreign driver's licence, may obtain an Ontario driver's licence without an examination.[39]

Demerit Points

(a) Regular drivers

Upon conviction of an offence under the Highway Traffic Act[40] a driver collects demerit points up to a total of 15, according to a schedule. When a driver has accumulated six to eight demerit points, the driver is notified by mail. When between nine and 14 demerit points are accumulated, the driver may be required to attend an interview to show cause why his or her licence should not be suspended. If the driver fails to appear, or to show proper cause why the licence should not be suspended, the Minister may suspend the licence for up to two years.

If a driver accumulates 15 or more demerit points, the Registrar will give notice and suspend the licence for 30 days after the date the licence is surrendered, or two years from the date of suspension, whichever comes first. For any subsequent offence, the Registrar will give notice and suspend the licence for six months from the date the licence is surrendered or two years from the date of suspension, whichever comes first. After the suspension period is over, the driver's record is set at seven demerit points.

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[38] H.T.A., Regulation 461.

[39] H.T.A., Regulation 461(3.

[40] R.S.O. 1980, c.198.

(b) Probationary Drivers

Drivers are classed as probationary for their first two years. If the driver has less than nine demerit points from the driver's learner's permit, or from a previous licence, the driver starts without demerit points. On the first occasion that demerit points are recorded, the probationary driver will receive a notice in the mail. Once six points have been accumulated, the licence is automatically suspended. The suspension time for probationary drivers is the same as that for regular drivers. Once the suspension period is over, the demerit points are reduced to zero.[41]

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[41] O. Reg. 359/81.

DEMERIT POINT SCHEDULE

O. Reg. 359/81

	Description	Number of Demerit Points
1.	Failing to remain at the scene of accident	7
2.	Careless driving	6
3.	Racing	6
4.	(a) Exceeding speed limit by 50 km/h or more	6
	(b) Exceeding speed limit by 30 to 49 km/h	4
	(c) Exceeding speed limit by 26 to 20 km/h	3
5.	Driver of bus fails to stop at railway crossings	5
6.	Driving through, around or under railway crossing barrier	3
7.	Failing to yield right of way	3
8.	Failing to obey a stop sign signal light or railway crossing signal	3
9.	Failing to obey directions of police constable	3
10.	Driving or operating a vehicle on a closed highway	3
11.	Failing to report an accident	3
12.	Improper passing	3
13.	Improper driving where highway divided into lanes	3
14.	Failing to stop for school bus	6
15.	Following too closely	4
16.	Crowding driver's seat	3

DEMERIT POINT SCHEDULE

	Description	Number of Demerit Points
17.	Wrong way on a one-way street or highway	3
18.	Failing to stop properly at a pedestrian crossing	2
19.	Failing to share road	2
20.	Improper right turn	2
21.	Improper left turn	2
22.	Failing to signal	2
23.	Unnecessary slow driving	2
24.	Failure to lower high-beam headlights	2
25.	Improper opening of vehicle door	2
26.	Prohibited turn	2
27.	Towing persons on toboggans, bicycles	2
28.	Failure to obey portable signal lights	2

Criminal Code

Driving conduct is also regulated by the Criminal Code.[42] I will not review each relevant section of the Code in detail. In addition, to the drinking and driving offences previously referred to, the Criminal Code regulates the following driving conduct:

(a) criminal negligence causing death;[43]
(b) criminal negligence causing bodily harm;[44]
(c) dangerous driving causing bodily harm;[45]
(d) dangerous driving causing death;[46]
(e) leaving the scene of an accident with intent to escape civil or criminal liability.[47]

If a driver is convicted of criminal negligence causing bodily harm or death, dangerous driving, dangerous driving causing bodily injury or death, leaving the scene of an accident, or impaired driving causing bodily harm or death, the court may make an order under the Criminal Code prohibiting the person from driving.[48] On conviction of an offence punishable by life imprisonment, the person may be prohibited from driving for any period; on conviction of offences punishable by a sentence of more than five years, the prohibition may be for up to ten years; and on conviction of any other offence, the prohibition may be for up to three years.[49]

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[42] R.S.C. 1970, c. C-34.

[43] C.C., s. 203.

[44] C.C., s. 204.

[45] C.C., ss. 233(3).

[46] C.C., ss. 233(4).

[47] C.C., s. 236.

[48] C.C., s. 242.

Driving Practices

Part IX of the Highway Traffic Act,[50] entitled "Rules of the Road", sets out the main provisions concerning driving conduct.

Three specific sections should be mentioned:

(a) School Bus Law

Section 151 of the H.T.A. deals with driver behaviour in relation to school buses. A driver is required to stop when a school bus is stopped with red signal lights flashing and may not proceed until the lights have stopped flashing. The only exception to this rule occurs where there is a median strip, and the car and bus are moving in opposite directions.[51] The penalty for contravening this provision is a fine of $100 to $500 on a conviction of a first offence and a fine of $250 to $1,000, or imprisonment for up to six months on conviction of a second offence.[52] As of 1982, the demerit points for failing to stop for a school bus increased from four to six points,[53] putting the offence on a par with careless driving, racing and exceeding the speed limit by more than 50 kilometers an hour. The only offence for which the penalty is more than six demerit points is failing to stop at the scene of an accident (seven points).

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[49] C.C., ss. 242(2).

[50] R.S.O. 1980, c. 198.

[51] H.T.A., ss. 151(5),(6).

[52] H.T.A., s.19.

(b) Seat Belt Law

In 1976 it became mandatory to wear seat belts in Ontario.[54] The law applies to both drivers and passengers, including those sitting in the back seat. It is the driver's legal responsibility to ensure that children between the ages of two and 16 wear seat belts. In 1982, this provision was amended, making it mandatory that all children be secured in a manner prescribed by legislation, thus extending the seat belt law to include infant restraints.[55] The penalty for contravention of the seat belt legislation is a fine of between $40 and $200.[56]

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[53] O. Reg. 599/82.

[54] The Highway Traffic Amendment Act, 1975 (2nd session) (No. 2) S.O. 1975 (2nd session), c.14, s.1.

[55] Highway Traffic Amendment Act 1982 S.O. 1982, c. 28, s.3.

[56] See S.O. 1983, c. 63, s. 45, amending R.S.O. 1980 c. 198, s. 188.

(c) Motorcycle Helmet Law

In 1967 an amendment to the Highway Traffic Act[57] made the wearing of motorcycle helmets mandatory. The performance standards for helmets were prescribed by regulation in 1968.[58] The regulation states that a helmet must have a smooth outer shell lined with a padded material and must have a chin strap. It must conform to the standards of one of the following: the Canadian Standards Association, the Snell Memorial Foundation, the British Standards Institute or the United States of America Federal Motor Vehicle Safety Standard 218.[59] Failure to comply with the motorcycle helmet provision is also punishable by a fine of between $40 and $200.[60]

(d) Speed Limits

Part VIII of the Highway Traffic Act sets out the provisions for speed limits in Ontario. The speed limit for any highway within a city, town, village, police village or built-up area is 50 kilometers per hour.[61] Outside these areas, the speed limit for any highway or "controlled-access highway" is 80 kilometers per hour.[62] Municipal councils or police village trustees can change these limits but they must be kept between 20 and 100 kilometers an hour.[63] The Ministry may designate construction zones on the highway and set speed limits for those areas.

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[57] R.S.O. 1980 c. 198, s. 88.

[58] See R.R.O. 1980, Regulation 482.

[59] O. Reg. 482.

[60] See footnote 56.

[61] H.T.A., ss. 109(2).

[62] H.T.A., ss. 109(1).

Penalties for speeding are as follows:

20 km/h or more over the limit:	$1.25 per km/hr.
20-39 km/h over the limit:	$1.75 per km/hr.
40-59 km/h over the limit:	$2.50 per km/hr.

If a driver were travelling 142 kilometers per hour in an 80 kilometer per hour zone, the fine would be $201.50. If a driver were travelling at a speed exceeding the limit by 50 kilometers per hour, his or her licence could be suspended for up to 30 days.[64] (The demerit point schedule is set out in Item 4 of Table I.)

Vehicle Design

Legislative jurisdiction for vehicle design is shared by the federal and provincial governments. The federal Ministry of Transport administers the Motor Vehicle Safety Act[65] and the Ontario Ministry of Transportation & Communication administers Part V of the Highway Traffic Act.[66]

The federal government has constitutional jurisdiction over international and inter-provincial trade. The long title of the Motor Vehicle Safety Act includes the wording "...and to provide safety standards for certain motor vehicles imported into or exported from Canada or sent or conveyed from one province to another." Federal standards apply at the level of the manufacturer, importer and dealer. Federal standards do not apply to the sale of a vehicle between private parties within a province, nor to the condition of motor vehicles being driven on the highways.

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[63] H.T.A., ss. 109(3).

[64] H.T.A., ss. 109(4).

[65] R.S.C. 1970, (1st Supp.), c.26.

[66] R.S.O. 1980, c. 198.

The provincial legislation sets standards for vehicles sold, registered or operated in the province. When vehicles are imported from outside Ontario, federal and provincial jurisdictions overlap. For the most part, federal standards apply to new cars and are enforced at the manufacturing or importing stage. Provincial standards apply to car owners.

Table I sets out the federal safety standards. They set requirements and standards for equipment installed in the vehicle.

Table 2 sets out the provincial standards. The general requirement for owners and drivers is set out as follows:

> No person shall drive or operate or permit the driving or operation upon a highway of a vehicle or vehicles that in combination are in such a dangerous or unsafe condition as to endanger any person.[67]

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[67] H.T.A., s.67 (as amended by S.O. 1983, c.63, s.17).

TABLE I: CANADIAN FEDERAL VEHICLE SAFETY STANDARDS

	Title	Effective date
101	Control location and identification	13/01/71
102	Transmission shift control sequence	"
103	Windshield defrosting and defogging	"
104	Windshield wiping and washing system	"
105	Brake system	"
106	Hydraulic brake hoses	"
107	Reflecting surfaces	"
108	Lighting equipment	"
108A	Lighting equipment - passenger cars	"
109	Pneumatic tires	"
110	Tire selection and rims	"
111	Rearview mirrors	"
111A	Rearview mirrors - passenger cars	"
112	Headlamp concealment devices	"
113	Hood latch system	"
114	Locking system	"
115	Vehicle identification number	"
116	Hydraulic brake fluid	"
118	Power windows	14/07/71
120	Tire selection & rims for vehicles other than passenger cars	4/04/79
121	Air brake systems	....
122	Motorcycle, motor driven cycle & moped brake systems	22/01/81
123	Motorcycle controls & displays	26/06/79
124	Accelerator control systems	12/12/73
201	Occupant protection	13/01/71
202	Head restraints	"
203	Driver impact protection	"
204	Steering column rearward displacement	"
205	Glazing materials	"
206	Door latches, hinges and locks	"
207	Anchorage of seats	"
208	Seat belt installations	"
	- 3 point belt requirements	12/12/73
	- Air bag system maintenance	
	- Air bag system requirements	24/07/74
	- Passive seat belt requirements	23/10/74
	- Seat belt warning system requirements	12/02/71

TABLE I: CANADIAN FEDERAL VEHICLE SAFETY STANDARDS

	Title	Effective Date
209	Seat belt assemblies	13/01/71
210	Seat belt assemblies anchorages	"
211	Wheel nuts, hub caps and wheel discs	"
212	Windshield mounting	"
213	Child seating and restraint systems	24/10/73
213.1	Infant restraints	3/06/82
214	Side door strength	27/12/72
215	Bumpers	26/07/72
216	Roof intrusion protection	14/03/73
217	Bus window retention release and emergency exit	14/08/74
218	School bus rollover protection	26/10/77
219	Windshield zone intrusion	19/08/81
221	School bus body joint strength	12/03/80
222	School bus passenger seating and crash protection	12/03/80
301	Full tanks, filler pipes & connections	13/01/71
301.1	Full system integrity (L.P.G.)	29/07/82
301.2	Full system integrity (C.N.G.)	29/07/82
302	Flammability	26/07/72

TABLE II: PROVINCIAL STANDARDS FOR VEHICLE SAFETY EQUIPMENT

The following are the requirements for obtaining a safety inspection sticker to register a vehicle:

1. Body work	Reg. No. 483, s.1 including,[68] - bumper and fenders s.1(a)(b)(d) - hood and latch s.1(i)(e) - energy absorbing material s.1(i) - seat belt assemblies and anchorages s.1(i)(j)(k)(l) - emergency exits on buses s.1(l)(n) - safety requirements for physically disabled passenger vehicles s.1(i)(p) - doors s.1(2)(3) - chassis frame underbody and mounts s.1(4) - drive shaft s.1(5) - mirrors s.1(6) - windshields and windows s.1(7) - fuel system s.1(8) - exhaust system s.1(9) - fifth wheel coupling devices s.1(10) - trailer hitches
2. Brakes s.2	- 2 working braking systems (regular brakes, and an emergency brake) H.T.A., s.46(1)(2)(3) - must be in good working order H.T.A., s.46(5).
3. Engine Controls and Steering	- acceleration control system s.3(1) - power steering s.3(3) steering column s.3(4) - front wheel alignment s.3(5)(6)(7)
4. Suspension system	- s.4

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[68] All section numbers refer to Regulation No. 483 of the Highway Traffic Act, R.S.O. 1980, c.198, as amended. Sections of the Highway Traffic Act itself are prefaced by " H.T.A.".

TABLE II: PROVINCIAL STANDARDS FOR VEHICLE SAFETY EQUIPMENT (continued)

5. Electrical system	- horn s.5(1) - windshield washer system s.5(2) - heating and defrosting s.5(3) - neutral starting switch s.5(4) - speedometer s.5(5)
6. Lighting	- headlight H.T.A., s.44(1) to (18), Reg. 483. s.6 - plate lights H.T.A., s.44(19) - parking lights H.T.A., s.44(20) - trailer lights H.T.A., s. 44(24)
7. Tires and wheels	- s.7
8. Numbered plates	- s.8

APPENDIX VI

Automobile Insurance

Canadian Automobile Insurance Plans (as of July 1, 1987)

Coverage for Private Passenger Automobiles

Nfld.	Que.	Ont./N.S./N.B./P.E.I.	Man.	Sask.	Alta./Yukon	B.C.	N.W.T.
Third Party Liability (Bodily Injury and Property Damage) Compulsory in all provinces							
Minimum $200 000	Minimum $50 000 No Exposure to Bodily Injury within Quebec	Minimum $200 000	Minimum $200 000	Minimum $200 000	Minimum $200 000	Minimum $200 000	Minimum $50 000 (Effective Jan 1 1988 Min $200 000)
Medical Payments							
$2000 per person excluding amounts under Government Medical & Hospital Plans Time Limit 2 years	No time or amount limit Includes rehabilitation	$25 000 per person including rehabilitation excluding Government Health Insurance Plans Time Limit 4 years	$20 000 per person excluding Compulsory Health Insurance Scheme	$10 000 per person discretionary to meet expenses	$5000 per person including rehabilitation Excluding amounts under Government Medical & Hospital Plans	$100 000 per person subject to third party limit includes rehabilitation excludes any amounts payable under surgical dental hospital plan or other insurer	$2000 per person excluding amounts under Government Medical & Hospital Plans
Funeral Expense Benefits							
$500 maximum	$2682 16 maximum	$1000 maximum	$1500 maximum	None	$1000 maximum	$1000 maximum	$1000 maximum
Disability Income Benefits							
$35 00 per week 104 weeks temporary + 104 weeks permanent 7 day waiting period Housewife $12 50 per week Max 12 weeks	Min $157 32 per week or 90% of net wages Max Income Gross $35 500 per year Temporary 5 years Permanent lifetime 7 day waiting period Non contributory	80% of Gross Wages Max $140 00 weekly 104 weeks temporary + Lifetime total & permanent Ont first day cover 14 day waiting period N S N B & P E I 7 day waiting period Unpaid housekeeper $70 00 per week Max 12 weeks	$150 00 per week or 70% of Gross Wages Max $300 00 weekly 104 weeks partial @ $60 00 7 day waiting period Homemaker Lifetime Total $150 00 weekly Partial $60 00 weekly Max 104 weeks	$150 00 per week Lifetime Total 104 weeks partial @ $75 00 7 day waiting period Housewife $150 00 weekly Total $75 00 weekly Partial Max 104 weeks	80% Gross Wages Max $150 00 weekly Yukon Min $40 00 weekly 104 weeks temporary or total 7 day waiting period Yukon Housewife $75 00 per week Alta Spouse $50 00 per week Max 26 weeks	75% Gross Wages Max $145 00 weekly 104 weeks temporary + Lifetime total & permanent 7 day waiting period Homemaker $145 00 per week To Age 65	Employed Person 80% Gross Wages Max $50 00 weekly Min $40 00 weekly 104 weeks temporary or total 7 day waiting period Housewife $50 00 per week Max 26 weeks
Death Benefits							
Death within 3 months after accident Married Male Age Limits 10 59 $5000 60 69 3000 70 + 2000 Plus $1000 each dependent child No limit Married Female Age Limit 10 59 $2500 60 69 1500 70 + 1000 Unmarried Person with living parents Scale by age Maximum $2500	Death anytime after accident Pension to dependent survivors based on Disability Income Benefits of Deceased Min $157 32 per week Without dependent $8046 48 or $4023 24	Death within 2 years after accident Head of Household Age Limits None $10 000 Plus $1000 each dependent beyond first No limit Spouse No age limit $10 000 Dependent Child $2000	Death anytime after accident Head of Household Age Limits None $10 000 Plus $2000 each secondary dependent Limit $10 000 Spouse No age limit $10 000 Dependent Child Maximum $2000	Death within 2 years after accident $10 000 to primary dependents Plus $1500 each secondary dependent Spouse No age limit $2 500 Equal division to surviving dependents Dependent Child $2 500	Death anytime after accident Head of Household $5000 plus $1000 for each dependent beyond first + 1% of Total Principal Sum for 104 weeks No limit Spouse $5000 Dependent Child Scale by age Maximum $1500	Death anytime after accident Head of Household $5000 + $145 00 Weekly for 104 weeks to first survivor Plus $1000 + $35 00 weekly for 104 weeks for each survivor beyond first No limit Spouse $2500 Dependent Child Scale by age Maximum $1500	Death anytime after accident $5000 + 1% per week for 104 weeks Head of Household Age Limits 10 64 $5000 65 69 3000 70 + 2000 Plus 20% of Principal Sum for each dependent beyond first No limit Spouse Age Limit 10 64 $2500 65 69 1500 70 + 1000 Dependent Child Scale by age Maximum $1500
Dismemberment Benefits							
Schedule based on 50% 100% of Principal Sum	Scheduled up to $39 329 13	Not included Becomes part of other recovery	Scheduled Benefits Maximum $100 000 Deducted from death benefits	Scheduled Benefits Maximum $10 000	Not included Becomes part of other recovery	Not included Becomes part of other recovery	Not included Becomes part of other recovery
Administration							
Private Insurers	Government bodily injury Private Insurers property damage	Private Insurers	Compulsory Insurance Government Monopoly Optional and Excess Government and Private Insurers compete	Compulsory Insurance Government Monopoly Optional and Excess Government and Private Insurers compete	Private Insurers	Compulsory Insurance Government Monopoly Optional and Excess Government and Private Insurers compete	Private Insurers

- Alberta, Ontario and Manitoba residents involved in accidents in Quebec receive from their own insurer the equivalent to the benefits available to Quebec residents from the Régie.

- Accident Benefits Coverage is compulsory except in Newfoundland. • Collision insurance is optional except in Manitoba ($200 deductible) and Saskatchewan ($500 deductible).

APPENDIX VII

A SELECT BIBLIOGRAPHY OF BOOKS, ARTICLES, REPORTS AND PAMPHLETS

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APPENDIX VIII

GLOSSARY OF INSURANCE AND RELATED TERMS

ACCIDENT FREQUENCY - The number of accidents related to the risk. Some risks are inherently "high frequency" risks as for example, most city transit systems. Other risks are "low frequency" risks which may go for a considerable length of time without reporting any accident but when an accident occurs, it is often quite a substantial one as for example, hydro electric systems.

ACCIDENT YEAR EXPERIENCE - Simplistically the matching of all losses occurring (regardless of when the losses are reported) during a given twelve-month period of time with all premiums earned (regardless of when the premiums were written) during the same period of time. More specifically, the total value (losses paid plus loss reserves) of all losses occurring during the defined twelve-month time period (i.e. the date of loss falls within the time period) is divided by the earned premium (see its definition) for this same exposure period. As the experience is developing, loss reserves are used in the calculation, but the ultimate result cannot be finalized until all losses are settled. While any twelve-month period can be used to define the exposure period, the year beginning January 1 is normally used. The most accurate method uses exposure earned premium (see its definition under EARNED PREMIUM) as the denominator, whereas in practice accounting earned premium (see its definition under EARNED PREMIUM) is frequently used as a matter of convenience.

ACTUARIAL RATES - Rates which are determined by using loss history, projections, and mathematical formulas.

ACTUARIAL SCIENCE - A scientific technique by which principles of mathematics are used to determine insurance rates. Factors considered include loss history, interest rates, and other costs projected over time.

ACTUARY - A person trained in the "principle of large numbers" and the "theory of probability" as it applies to the insurance business. He is usually a mathematician and his responsibilities are to calculate the proper premium rates based upon experience and often to consider the accuracy of the assessments of reserves.

ADDITIONAL INSURED - A person, other than the named insured, who is protected by the terms of the policy. Usually a specified individual such as a spouse or a member of the insured's family -- but sometimes, as in automobile insurance, any person provided he is driving the insured vehicle with the insured's permission.

ADEQUACY - A required characteristic of an insurance rate. The rate must provide sufficient funds to pay losses and expenses. Such rate adequacy is required by insurance laws to prevent insurer insolvency.

ADJUSTER - The person who investigates insured losses and negotiates the settlement of claim on behalf of the insurer. Public adjuster is one who, for a fee, represents policyholders in the adjustment of their losses with insurance companies.

ADJUSTMENT - The process of arriving at the settlement of a claim. It may consist of a series of computations in an uncomplicated fire loss or it may involve discussions of the degree of liability, quantum of damages and other matters in problem liability claims.

AFFIDAVIT - 1) A sworn statement. 2) A written statement in the name of a person known as the "deponent", who has voluntarily signed and sworn or affirmed to such a statement. Such statement is known as an affidavit.

AGENT - A person who is employed to act on behalf of another. An insurance agent usually has a contract with the insurance company to sell the insurance company's policies to the public, on behalf of the insurance company, and is paid a commission on such business.

AGENCY EXPERIENCE - Companies keep a record of the profitability of business through their individual agents. By comparing business written and losses incurred for all its agents, a company is able to assess the relative value of these agents to the company.

AGGREGATE - The dollar amount of insurance coverage during one specified period, usually 12 months, for all insurance losses sustained under a policy during such period.

ALIEN COMPANY (OR INSURER) - A company incorporated in a foreign country.

ANNUAL RETURN - Financial information that must be filed with a government department each year. Non-profit charitable institutions must file a financial return each year with the Department of National Revenue if they wish to maintain their tax-exempt status and their right to issue tax-deductible receipts to financial supporters. Unions and corporations in Canada, above a certain size, are required to file information annually under the Corporations and Labour Unions Returns Act. Federally incorporated companies have to file an annual return on their financial activities for deposit with the Department of Consumer and Corporate Affairs. Provincially incorporated companies are also required to file an annual return with the provincial government if they wish to maintain the privileges of incorporation.

ANNUITY - The payment of a regular pension or similar benefit for a specified number of years or for the lifetime of the beneficiary, paid out of an invested sum of capital. The proceeds of Registered Retirement Savings Plans are usually converted into an annuity known as a registered retirement income fund. The federal government began selling annuities in 1908 and stopped selling them in 1975. Before there were government pensions, annuities provided an important way for ordinary Canadians to put aside money for their old age. Now they are sold only by insurance companies.

APPRAISER - The person called upon to establish quantum or the extent of material loss resulting from a claim, or to assist in the underwriting of a risk, usually recognized as an expert in his field of endeavour, i.e. real estate, gemologist, automotive or industrial equipment. The independent appraiser is an independent businessman who represents many insurance companies, reporting to the adjuster or company. The staff appraiser represents one company exclusively and reports directly to that company. The adjuster's appraiser usually represents one independent adjuster and reports directly to that adjuster.

ARBITRATION - An arrangement for reaching agreement between two sides by which both sides submit their case to a committee or a person who generally is vested with the authority of giving a final answer to the dispute.

ARBITRATION CLAUSE - A clause in an insurance policy providing a means of resolving differences between the company and the policyholder without litigation. Usually, each party appoints an arbiter. The two thus appointed select a third arbiter, or umpire, and a majority decision of the three becomes binding on the parties to the arbitration proceedings.

ASSIGNED RISK PLAN - A plan between insurance companies in certain areas to accommodate the poorer risks which would not normally be acceptable to an individual company.

In operation, the risk which is difficult to place is presented to an office designated for that specific purpose and is assigned to an insurance company which must write it. The assignments are made in proportion to the volume of business written by that particular company.

Since there is a certain amount of stigma about the insured whose risk is so poor that it must be "assigned", and the resulting delay in processing, the Assigned Risk Plan is now superseded in many areas with a "facility" plan. (See also: FACILITY PLAN).

ASSIGNMENT - The transfer of an interest from one party to another. Insurance policies are personal contracts and are not transferable except by consent of the insurance company.

AUTOMOBILE INSURANCE - A form of insurance protection indemnifying an insured for loss arising out of the ownership, use or maintenance of an automobile. A loss may arise out of his legal liability to others (commonly referred to as Bodily Injuries or Public Liability and Property Damage) or loss or damage to the vehicle arising out of collision, fire, theft or a number of other risks. Medical, surgical and hospital care for the insured and his passengers may also be included in the automobile insurance.

An Automobile Insurance policy can also be extended to insure the insured not only when driving his own vehicle but driving the vehicle of any other of the same type with the acknowledging consent of the owner of that car.

AUTOMOBILE LIABILITY INSURANCE - A form of liability insurance (See: LIABILITY INSURANCE) which is specifically designed to indemnify for loss incurred through legal liability for bodily injury and damage to property of others caused by accident arising out of ownership or operation of an automobile.

"AUTOMOBILE PROBLEM" - This involves the socio-economic necessity of an automobile, the magnitude of the exposure, the need for liability insurance, the social insurance aspect, and the political appeal of the factors involved (safety, insurance, tort law).

AVERAGE - A single number that is intended to be typical of a series of numbers. For example, the average weekly wage is a figure that is representative of a wide range of individual weekly wages; the average selling price of a new home is representative of the different prices being charged for new homes.

Averages are useful because they give a more accurate picture of performance over periods of time, a picture that can be used as a standard in assessing short-term performance. For example, current inflation, unemployment, and gross-national-product growth rates are better understood if they are measured against the average of the past five or ten years. Averages also give a truer picture, in the sense that they smooth out the effects of short-term fluctuations such as bad weather or an industrial dispute.

There are different methods of calculating average figures. The most commonly used average is the simple average, which is produced by taking a series of numbers, adding them together, and dividing the total by the number of numbers; for example, if a country had, in a five-year period, inflation rates of 6.7, 7.4, 8.9, 9.3, and 8.2, its average annual inflation rate would be 8.1 per cent. A weighted average is calculated in a similar fashion, except that the relative importance of different components of the average are taken into account. For example, in calculating the Consumer Price Index (CPI) which represents an average of a typical bundle of consumer purchases in a month, more weight is given to food costs, which represent a large element of a family's budget, while a relatively small weight is attached to recreational spending.

BANK RATE - The rate of interest the Bank of Canada charges to the chartered banks and to money-market dealers for their infrequent loans. The chartered banks can borrow from the Bank of Canada as a last resort, usually for just a few days. A bank, for example, may need a one-million-dollar loan for a day or two to maintain its minimum cash balance until its cash position has improved. The bank rate is more important, though, as a signal to the banking system on the direction of monetary policy. An increase in the bank rate is normally a sign that the Bank of Canada plans to tighten the money supply. This in turn will lead to an increase in interest rates charged by the chartered banks and other financial institutions to their customers. A drop in the bank rate is normally a signal that the Bank of Canada intends to relax monetary policy, and the bank system will respond by lowering interest rates. The Bank of Canada will follow up changes in the bank rate with other actions to increase or decrease money supply.

The speed with which the banking system responds to changes in the bank rate depends on the state of financial markets. For example, increases in the bank rate may not be followed by immediate increases in mortgage interest rates if there is an abundant supply of mortgage funds and a shortage of customers for mortgages. But, if higher interest rates were to continue for some time, mortgage lenders would have to raise their rates as well. Increases in the bank rate, and hence in lending rates in the banking system, also mean that banks and other financial institutions have to pay higher interest rates to their depositors.

The U.S. equivalent to the bank rate, set by the Federal Reserve Board in Washington, is the discount rate.

BARRIERS TO ENTRY - Market obstacles that inhibit or prevent the entry of new firms into an industry and thus restrict competition. Economies of scale in capital-intensive industries restrict entry; there are high start-up costs and a new competitor will have to have a high level of production to be price-competitive. Unless he thinks he can justify those high start-up costs, a would-be competitor in a capital-intensive industry will be reluctant to make the investment. But deliberate anti-competitive policies by existing producers - such as product differentiation based on a large investment in advertising, exclusive-dealing contracts with retailers, and patent restrictions - also make it extremely difficult for a new firm to enter an industry. Similarly, government regulation can be a barrier to entry; for example, farm marketing boards make it difficult for new agricultural producers to enter the market, while government licensing requirements restrict the entry of new radio, television, and airline services.

Where there are significant barriers to entry, existing producers may be able to earn excess profits; but if there is relative ease of entry, then profit margins are likely to be lower. The barriers to entry represent the costs that would-be producers must overcome; their existence usually means, unless there is relative ease of entry, that new producers have higher costs, at least on first entering the industry, than do existing producers.

A country that wants to increase competition has to find ways to reduce barriers to entry in many industries, by changing patent laws, for example, or by outlawing exclusive dealing and other such arrangements. (See also: CONTESTABLE MARKET).

BASE PERIOD - A selected month, year, or set of years used in calculating an index number or growth rate. Statistics Canada uses 1971 as its base year for most indexes and in calculating changes in CONSTANT DOLLARS or in real terms. If 1971 is the base year (1971 = 100) and the consumer price index is 193.8, then consumer prices have risen 93.8 per cent since 1971. Similarly, if 1971 is the base year and the gross national product has risen by 49 per cent in 1971 dollars (after inflation has been deducted for the period), then real growth or growth in physical output has been 49 per cent.

BENEFICIARY - The one to whom the proceeds of a policy are to be paid as set forth in its terms.

BENEFITS - The amount paid under an insurance contract. (See also: PRIMARY BENEFITS).

BROKER - An independent agent who brings together a buyer and a seller so that a sale can be made. There are many different kinds of brokers, each with specialized knowledge of his market: in shares traded on a stock exchange, the stockbroker; in property (such as houses or commercial buildings), the real-estate broker; in commodities (such as wheat and porkbellies), the commodities broker; and in insurance, the insurance broker. For their services, brokers are paid a commission (See: BROKERAGE), which is usually related to the value of the transaction. Like the agent, the broker is licensed in the province or provinces in which he conducts his business.

BROKERAGE - The fee or commission charged to a customer by a stockbroker, commodity dealer, real-estate agent, or other kind of broker.

CALENDAR YEAR EXPERIENCE - 1) Simplistically, the matching of all losses incurred (not necessarily occurring) within a given twelve-month period, usually beginning on January 1, with all premiums earned within the same period of time. Incurred losses will include the change in Incurred But Not Reported (IBNR). More specifically, the total value of all losses incurred (not necessarily occurring) during the calendar year is divided by the accounting earned premium for this same exposure

period. Losses incurred are equal to the sum of losses paid, plus the outstanding loss reserves at the end of the year, less the outstanding loss reserves at the beginning of the year. Once calculated for a given period, calendar year experience never changes.
2) Experience of premium and incurred loss transactions actually occurring within the calendar year beginning January 1 irrespective of the contractual dates of the policies to which the transactions relate.

CANCEL - To terminate a contract. Usually applied to the termination of a policy before its natural expiration, but may be used to describe the ending of any contract during its natural life, such as an agent's contract.

CANCELLATION - The termination of the policy before the end of a policy period. Usually if the company cancels the policy, the insured is entitled to a pro rata return of premium for the unused portion of the policy. If the insured cancels, he is entitled to a reduced refund of premium.

CAPACITY - The measure of an insurer's ability to issue contracts of insurance. Measured usually by the largest amount it will accept on a given risk or, in certain other situations, by the maximum volume of business which the company is prepared to accept.

CAPTIVE AGENT - An agent who places all his business with one insurance company is known as a "captive agent". In some instances he may be a salaried employee of the company although in others he may be selling the insurance on a commission basis, but has a contract to write only business that would be acceptable to the one insurance company. Sometimes called "exclusive agent".

CARRIER - 1) The insurance company which provides the protection for a particular risk. 2) A transporter of goods. A common carrier is one which is available to the public for the transport of any goods. A contract carrier works under long-term contract for one or more shippers. A private carrier transports only the goods of its owner. (Lenz)

CASH FLOW - The funds available to a company to pay dividends and finance expansion. It is calculated by adding together net earnings or after-tax profits (before extraordinary items), all deductions that do not require an actual cash outlay, such as depreciation, depletion allowances, or deferred income taxes, and any minority interest in the earnings of another company. Since it includes tax deductions that do not require an actual cash outlay, the cash-flow figure gives a more useful picture of a company's financial position than net earnings or after-tax profits alone.

CASUALTY INSURANCE - The group of coverages which includes insurance against liability claims and almost all other types except fire, marine and life.

CERTIFICATE OF INSURANCE - A certificate of insurance is, in the usual sense of the word, a copy of a policy.

CLAIM - The amount which a policyholder believes he has coming from an insurance company as the result of some happening insured against. After its amount has been determined, it becomes a "loss". In practice, the terms "claim" and "loss" are synonymous.

CLAIM DEPARTMENT - The department of a company dealing with losses or claims made by the policyholders.

CLAIM EXPENSES - The costs incurred in processing claims: court costs, interest upon awards and judgments, the company's allocated expense for investigation and adjustments and legal expenses (excluding, however, ordinary overhead expenses of the company such as salaries, monthly or annual retainers, and other fixed expenses which are defined as unallocated loss adjustment expenses). Also known as Loss Expenses or Loss Adjustment Expenses.

CLAIM RESERVE - The amount of money set aside by an insurance company for a reported claim that has not been settled.

CLAIMS-MADE BASIS - The provision in a contract of insurance or reinsurance that coverage applies only to losses which occur and claims that are made during the term of the contract. (Losses occurring before the contract term are sometimes covered by the addition of "prior acts" coverage by the addition of "tail" coverage). Once the policy period is over in claims-made covers, the approximate extent of the underwriter's liability is known. On the other hand, the traditional "occurrence" liability insurance method provides coverage for losses from claims which occurred during the policy period regardless of when the claims are asserted. With the traditional "occurrence" liability coverage method, the underwriter may not discover the extent of liability for years to come from losses asserted to have occurred within the policy period. With claims-made covers which are renewed, however, losses which occurred during any period when the policy was in force are again covered if reported during the renewal term. In summary, the traditional method is similar to claims-made if the latter has added to it both "prior acts" and "tail" coverage.

COLLATERAL - Accompanying as a side or secondary fact, or acting as a secondary agent; subsidiary; indirect. Related to or not strictly a part of the main thing or matter under consideration.

COMMISSION - In insurance an amount paid an agent for insurance placement services. (See also: BROKERAGE).

- **BROKERAGE COMMISSION** - An amount paid a broker for insurance or reinsurance placement services.

- **CEDING COMMISSION** - In reinsurance an allowance (usually a percentage of the reinsurance premium) made by the reinsurer for part or all of a ceding company's acquisition and other costs. The ceding commission may also include a profit factor for the reinsured.

- **OVERRIDING COMMISSION** - a) A fee or percentage of money which is paid to a party responsible for placing a retrocession of reinsurance, b) In insurance a fee or percentage of money which is paid by the insurer to an agent or general agent for premium volume produced by other agents in a given geographic territory.

- **OVERWRITING COMMISSION** - Another name for Overriding Commission.

- **PRODUCER COMMISSION** - The same as Brokerage Commission.

- **REINSURANCE COMMISSION** - The same as Ceding Commission.

COMPETITION - A market in which rival sellers are trying to gain extra business at one another's expense, and thus are forced both to be as efficient as possible and to hold their prices down as much as possible. Competition is thus a sophisticated yet uncoordinated mechanism that sorts out the actions of millions of buyers and sellers, and uses the resulting pattern of supply and demand to determine what shall be produced, in what quantities, and at what price.

Insofar as competition exists, it is an effective way of achieving the efficient allocation of resources and the lowest cost for goods and services. Much of classical and neoclassical economics is based on the notion of perfect competition, in which numerous firms sell identical goods and therefore have to hold down prices. But the real world of the modern mixed economy is one of imperfect competition, where large firms are able to exercise a significant control over prices and where the barriers to entry prevent new firms from entering the industry and competing by selling at lower prices.

COMPETITION POLICY - Legislation that protects the consumer against unfair business practices and the exploitation by oligopolies and monopolies of their excessive market power to charge high prices and curb competition. Thus, the purpose of competition policy is to improve the efficiency of the marketplace and to promote competition. Among the specific practices covered by competition law are collusion among competitors to fix prices, to allocate market, or to prevent the entry of new firms, or takeovers of competitors to reduce competition and achieve monopoly power, resale-price maintenance to prevent lower prices, misleading advertising, and other restrictive practices.

COMPREHENSIVE - A word commonly used preceding the description of the type of policy issued to designate that the particular policy is broader in form than the earlier policies issued by the same company. The increase is generally an increase of the scope of the contract or extension of it into additional perils or both.

COMPREHENSIVE AUTOMOBILE INSURANCE - This type of automobile insurance provides coverage to repair your car when it is damaged in circumstances other than by a collision, e.g. fire, theft, vandalism, glass breakage, etc.

COMPULSORY AUTOMOBILE INSURANCE - Many jurisdictions in Canada and the U.S.A. require evidence of the existence of valid third party liability automobile insurance before a motor vehicle permit will be issued or renewed. In some jurisdictions, accident benefits and collision coverages may also be compulsory.

CONCENTRATION RATIO - The percentage of shipments, employment, assets, or profits accounted for by the four largest establishments or four largest enterprises within a group of competing firms. Three common measures are used: 1. The inverse index, which shows the number of firms or establishments that account for 80 per cent of factory shipments or employment in a particular industry. 2. Industry concentration ratios, which show the percentage of the value of shipments accounted for by the largest 4, 8, 12, 16, 20 and 50 enterprises or establishments in a particular industry. 3. The Herfindahl Index, which measures concentration in terms of employment and shipments added together.

CONFLICT OF INTEREST - A situation in which the interest of one person and the interest of someone else (including a financial institution) acting on behalf of that person are at variance. Such a situation can also occur when someone, acting on behalf of several customers whose interests are at variance, must choose (or at least has the opportunity to choose) to serve the interest of one over the interest of the others.

CONSTANT DOLLARS - A statistical term designed to show physical changes in output, income, profits, or sales by adjusting dollar values for a year, or a series of years, for inflation. For example, the gross national product (GNP) for 1980 can be expressed either in current 1980 dollars or in constant dollars with, say, 1971 as the base year. The constant-dollar figure will deduct all the inflation of the period 1971-1980 and show the GNP in terms of 1971 purchasing power, or as the real growth of the economy. Such an exercise is useful in showing the real changes taking place in output, income and other economic measures, especially in times of high inflation; it shows the real changes that have occurred, as opposed to the changes that simply reflect inflation.

CONSUMER PRICE INDEX (CPI) - A monthly measure of changes in the retail prices of goods and services purchased by Canadians living in all parts of the country in communities with a population of thirty thousand people or more. The index is based on the shopping basket of three hundred goods and services, that, in 1967, families of from two to six people, with annual incomes of four to twelve thousand dollars, would normally buy. It is a weighted index, which attributes greater importance to price changes for food and housing, for example, than to price changes for bus tickets and movie-theatre admissions. The CPI is published monthly for Canada and for fourteen major cities, using 1971 as the base year (1971 = 100). Price changes can be broken down into sub-groups - as, for example, they affect goods and services, food and non-food prices, or any of the individual sectors measured. A seasonally adjusted monthly consumer price index is also produced, showing inflation trends. Generally, it is the CPI that is used in COLA clauses and in indexation of the income-tax system, or of social benefits such as the old-age pension.

CONTESTABLE MARKET - A market into which there is a freedom of entry and from which exit is absolutely costless. (See also: BARRIERS TO ENTRY).

CONTINGENT LIABILITY - A commitment to make a payment that is contingent on a specified event taking place - e.g., a guarantee that a loan would become payable by the guarantor in the event that the borrower were to default.

CORPORATE GOVERNANCE - A form of regulation internal to the institution. The management and directorate of a financial institution are structured, and internal rules and regulations are formulated, so as to achieve the desired corporate behaviour. An example is the institution of, and powers given to, committees of boards of directors to supervise various aspects of the business of financial institutions. Audit committees and committees to oversee non-arm's length transactions are cases in point.

CROSS-REFERRAL - The referral of potential customers by one institution to another, for further servicing of their needs.

CROSS-SELLING - A form of networking in which the agent of one financial institution sells the products of another institution.

CUT RATE - A rate less than the published or standard rate.

DAILY REPORT - A copy of a policy which is used as the agent's or the company's record. The most used record in a company office.

DAMAGES - A sum of money claimed or awarded as compensation for loss or injury.

DEDUCTIBLE CLAUSE - Some policies are written to pay only after the policyholder has himself suffered an agreed amount of loss. The amount which he must lose first is "deducted" from the total of the damage to determine the amount the company must pay and thus becomes the "deductible".

DEGREE OF RISK - This reflects the accuracy with which the occurrence of loss can be predicted. It is measured by the probable variations of actual loss experience from expected loss experience. The lower this variation the smaller the risk becomes. The greater the number of exposures in the group studied the more predictable and the smaller the percentage variation or degree of risk.

DIRECT GOVERNMENT REGULATION - An approach to regulation in which the rules and regulations governing the behaviour of financial institutions are set down in law by government, and government officials ensure compliance with those rules. The Bank Act, the operations of the Office of the Inspector General of Banks and of the Ontario Loan and Trust Corporations Act, and the Ontario Ministry of Financial Institutions are examples.

DIRECT WRITTEN PREMIUM - The gross premium income (written instead of earned) of a primary company adjusted for additional or return premiums but before deducting any premiums for reinsurance ceded and not including any premiums for reinsurance assumed.

DISABILITY -Loss of Income - usually associated with accident health policies, workmen's compensation or employer's liability policies. Certain benefits are payable for the period of disability. In accident and health most companies restrict such income payments to a portion percentage-wise of the insured's current earnings and with a top dollar limit of say $500.00 or $1,000.00 per month.

- **TOTAL TEMPORARY DISABILITY** - Is where the disability is such as to make the party unable to carry out any part of his normal work, but for which recovery is expected.

- **PARTIAL TEMPORARY DISABILITY** - Is where the party is unable to put in a full time job but is nevertheless able to perform one or more of his normal work obligations. Full recovery in due course is to be expected.

- **TOTAL PERMANENT DISABILITY** - Is a disability that permanently disables the party from resuming his normal gainful employment.

- **PARTIAL PERMANENT DISABILITY** - Is the impairment of the use of some function of the body as for example the loss of a finger which lessens the efficiency of the individual but nevertheless does not preclude him entirely from earning a living.

DISABILITY BENEFITS INSURANCE - A form of coverage which provides benefits to employees disabled by sickness or accident not related to employment.

DISCOUNT BROKER - Discount brokers buy and sell securities for their clients at a reduced rate of commission. Unlike full-service brokers, discount brokers do not provide investment advice.

DOG - The popular name for a risk that almost nobody wants to accept.

DRIVE-IN CLAIMS SERVICE - A system employed by automobile insurers whereby vehicles with minor insured damage, can be driven to the company's local "drive-in" Claims Office for inspection and immediate settlement of the damage claim.

DRIVER TRAINING CREDIT - To encourage driver education courses at schools and colleges, many insurers grant premium rebates to applicants for private passenger automobile insurance who have successfully completed an approved training program.

EARNED PREMIUM - That portion of written premium equal to the expired portion of the time for which the insurance or reinsurance was in effect. Technically, the following definitions are appropriate.

- **ACCOUNTING EARNED** - This is the most common and widely understood method. The unearned premium reserve at the beginning of the period is added to the premium written (booked) during the period and the unearned premium reserve at the end of the period is subtracted. Accounting earned is the figure used in the annual statement.

- **EXPOSURE EARNED** - This method calculates the premiums which were actually exposed to loss (earned) for the period. The date on which premiums were booked is disregarded. What is significant is the effective date and term to which the premium applies. The portion of the premium written which was exposed to loss (earned) is allocated to the exposure period whether the premiums were booked prior to the period, during the period or after the period. The exposure earned premium eliminates the deficiency contained in accounting earned premium that results from timing problems in the recording of premium records.

ECONOMIES OF SCALE - Reductions in the average cost of production, achieved by increasing the volume of output and thus using the various factors of production more efficiently. By making use of advanced machinery, specialized labour, interchangeable parts, automation, large-scale distribution, and ongoing research and development, a firm should be able to produce a product much more efficiently. But these economies can only be achieved when the volume of production is high enough to justify the heavy capital investment and extensive division of labour; when production is high enough, the big, capital-intensive, highly specialized plant can produce at a much lower average cost than a similar smaller plant.

This explains why, in many modern industries such as petrochemicals, mineral processing, computers, automobile assembly, and telecommunications, it is hard for small companies to survive, and why it is important to have access to large markets. In many instances, where the costs of innovation and of capital equipment are so high, access to large markets is essential if the benefits of economies of scale are to be achieved - or indeed, the investment in a new plant made. At some point, when marginal cost equals average cost, a plant will stop yielding economies of scale; it will then be at a point where diseconomies of scale begin, with each extra unit of output costing more than the average cost and thus being unprofitable. In other words, a plant can produce both too little and too much.

EFFECTIVE DATE - The date upon which a policy first becomes liable to pay a loss. The starting date.

ELEMENTS OF AN INSURANCE CONTRACT - The essential elements of an insurance contract are the same as those of any legal contract. These include: offer and acceptance (the agreement); competent parties; legal purpose; and consideration. However, an insurance contract also may be divided into four basic parts. These are: Declarations, Insuring agreement, Conditions, and Exclusions (the D-I-C-E provisions).

ENDORSEMENT (or INDORSEMENT) - Endorsements, sometimes called indorsements, appear as extra slips of paper attached to a policy indicating that the written consent of the parties has been given to a change in the terms of the original contract and an avowal that such change will not affect the insurance. They should always be added to the policy not any renewal slip.

Note the distinction from a rider which is the addition of a new peril to a policy and in effect, therefore, an additional insurance policy combined with the original.

EQUITY - In insurance regulation equity means equity toward the consumer and it is defined as reasonableness, impartiality, and fairness. In insurance rates this means that the rates do not unfairly discriminate against either insured or insurer. When rates are equitable all insurers pay their fair share of projected claims and expenses. Complete equity would be impossible because of the uniqueness of exposures thus groups or classes are used.

EQUITY CAPITAL - The capital in a firm that represents ownership. The owners of the equity capital - the firm's common shares - are entitled to all the assets and income of the firm after all the claims of creditors have been paid.

EXAMINATION - A check of the affairs of the insurance company and its general practices by governmental authority. The check is usually more in the nature of an audit.

EXCLUSION - Something not covered and so set forth in the wording of a policy.

EXPENSE RATIO - The percentage of premium used to pay all the costs of the insurance company in writing and servicing the business including agent's commission as a ratio to the premium itself.

EXPERIENCE - As used in insurance, the financial record of a policy or class of business. A policy or class of business in which the losses have been modest is described as having been "good experience". Where losses are high the term "poor experience" is used. Statistically the "experience" on an individual risk is obtained by comparing the losses with the premium, usually over a period of years. The experience of a class of business, a territory, an agency, etc. is obtained by a similar comparison as applied to them.

EXPERIENCE RATING PLAN - This is a method of rating which provides that the experience (good or bad) of an individual firm can have an effect on its rates.

EXPIRATION - A policy "expires" when the time for which it was written has run out. "Expiration" is the date on which it expires.

EXPOSURE - 1) The danger of loss (particularly by fire) arising from what happens to another risk close by. 2) Also the sum total of values which if damaged or destroyed

would cause loss under a policy, i.e., the value of everything a policy insures.
3) Also used as a measure of the rating units or premium basis of a risk, e.g., payroll exposure or an exposure of a number of automobiles.

EXTENDED COVERAGE - An endorsement that enlarges the coverage afforded by the primary policy. In fire policies, the "Extended Coverage" adds still more perils such as accidental leakage of plumbing and heating systems, vandalism, etc.

FACILITY PLAN - A plan for assuring a market for the poorer automobile risks.

In areas where the plan is in operation, the "facility" enables all companies to take whatever risks are prescribed by their underwriting policy and wherever there is a risk that is considered to be substandard by the underwriter, 85 per cent of it may be transferred to the "facility" and 15 per cent retained. In certain extreme cases of a bad accident or convictions experience or both, the facility would accept 100 per cent of the risk. The "facility" is underwritten by all the insurance companies and thus the insurance companies share the poorer risks and are prorated in dollars rather than prorated in assignment of the individual risks to individual companies. (See also: Assigned Risk Plan).

FAMILY AUTOMOBILE POLICY - A broad form combination policy for family use.

FIXED COST - Costs that do not change in a business, at least in the short run, regardless of the level of production. Such costs, often described as overhead, include rent, maintenance, interest, property taxes, insurance and administrative salaries. Even if production fell by 50 per cent, these costs would remain the same. However, if it appeared that production would remain much lower for a long time, then some of these costs could be reduced. Some administrative staff might be fired; or the firm could move to a smaller building and save on rent, maintenance, insurance, and property taxes. (See also: VARIABLE COST).

FLAT RATE - A gross premium is at times referred to as a "flat rate" and from this, deduction is allowed for co-insurance, etc.

FOREIGN INSURER - See: ALIEN COMPANY

FULL COVERAGE - An insurance policy without a deductible provision.

GRACE PERIOD - The period of time following the renewal date of an insurance policy, during which the premium may be paid without any extra expense or penalty.

"GREEN BOOK" - An annual automobile experience exhibit produced for government by the statistical arm of Insurance Bureau of Canada.

GROSS UP - To add back to the value of the property or income received the amount of the tax that has been deducted.

INCURRED BUT NOT REPORTED (IBNR) - A phrase referring to losses which have occurred but have not been reported to the insurer or reinsurer.

INCURRED CLAIMS - The figure for incurred claims is arrived at as follows:- Outstanding claims at end of period, plus paid claims (including external adjustment expenses), plus internal claims expense adjustment, minus salvage and subrogation recoveries, minus outstanding claims at beginning of period, equals incurred claims.

INCURRED EXPENSE (OTHER THAN LOSS EXPENSE) - An expense which has happened but which may or may not have been paid.

INCURRED LOSS RATIO - The relationship between incurred losses and earned premium, usually expressed as a percentage.

INCURRED LOSSES - 1) In insurance accounting an amount representing the losses paid plus the change (positive or negative) in outstanding loss reserves within a given period of time. 2) Losses which have happened and which will result in a claim under the terms of an insurance policy or a reinsurance agreement.

INDEXATION - The adjustment of pensions, wages, social-assistance benefits and income tax rates for inflation. The reason for adjusting pensions, wages, and social-assistance benefits is to ensure that there is no decline in the real purchasing power of these payments as a result of inflation. Similarly, Canada's income tax system has been indexed since 1973; the basic exemptions and the rate schedule are adjusted for inflation so that taxpayers are not pushed into higher tax brackets as their pay goes up, unless they have a real increase in their income.

INELASTIC DEMAND - Demand that shows little change as a result of a price change. An increase in price will not reduce demand by much; a reduction in price will not increase demand by much. The demand for life's necessities is inelastic; for example, no matter how much producers lower the price of sugar or bread, it is unlikely that they can increase the demand very much; even with an increase in price, consumers will continue to buy the product unless the price rise is significant, persists, and there is a ready and acceptable substitute (tea instead of coffee, for example).

INELASTIC SUPPLY - Supply that shows little change as a result of a price change. An increase in the price will not increase the supply by very much; a reduction in price will not reduce the supply by very much.

INSURABLE INTEREST - "To make insurance policies legal and valid, the insured must possess such an interest in the subject of insurance as may be sufficient to involve him in a monetary loss, should the subject be damaged or destroyed." In other words, if he has a direct monetary interest in the property to be insured, he has insurable interest. This interest may be of various character; it may be that of an owner, of a lessee, of a guardian, a bailee, an executor, administrator, bailiff or sheriff, a creditor. As long as there is a real monetary interest, there is an insurable interest.

INSURANCE - Is the undertaking usually by a company specializing in such undertakings to indemnify another person against loss or liability arising out of certain perils.

INSURANCE AGENT - See: AGENT

INSURANCE BROKER - See: BROKER

INSURANCE POLICY - See: POLICY

INSURED - One who transfers a risk to another. The person named in the agreement of indemnity from an insurance company (or person) affording them indemnity from perils as set out therein. Interchangeable with "assured".

INSURER - The insurance company which has agreed to accept the risk and to supply the indemnity to an insured in the event of loss.

INSURING CLAUSE - The part of the insurance policy which sets out the specific agreement to protect against the particular peril for which the insurance is purchased. It is an essential part of all insurance contracts.

INVESTMENT INCOME - Money earned from invested assets. May also include realized capital gains, or be reduced by capital losses over the same period.

KEETON-O'CONNELL PLAN - A plan for compensating automobile accident victims on the basis of making good their economic loss--wages, medical expenses, etc.--without the usual legal proof of negligence. Devised by Professors Robert E. Keeton and Jeffrey O'Connell; it is too complex for a simple definition. This and similar plans come under the broad definition "No-Fault Auto Insurance".

LAPSE - Where a policy has been allowed to run for its determined time and has not been renewed, the policy is said to have lapsed.

LAW OF LARGE NUMBERS - A mathematical concept which postulates that the more times an event is repeated (in insurance, the larger the number of homogeneous exposure units) the more predictable the outcome becomes. In a classic example, the more times one flips a coin the more likely that the results will be 50% heads, 50% tails.

LEGAL LIABILITY - The responsibility imposed under law upon one person to another whether by negligence (common law) or by statute or contract.

LIABILITY - A responsibility of one person to another enforceable in law. (See also: LEGAL LIABILITY).

LIABILITY INSURANCE - Provides protection for the insured against loss arising out of his legal liability resulting from injuries to other persons or damage to their property.

LOADING - An amount added to a basic rate. Loading in insurance is not an uncertain figure just cooked up to get a higher premium. In determining a rate, for example, the statistics produce a certain rate for a certain risk against a certain peril. However, the insurance company has to secure the business and administer the distribution of the money and for that purpose there is a definite ascertainable cost. When that figure is added to the basic rate it is called "Loading".

LOSS - 1) In insurance it means the amount the insurer is required to pay because of a happening against which it has insured. 2) A happening that causes the company to pay. 3) Also refers to the overall financial result of some operation, as opposed to "profit".

LOSS OR DAMAGE - Loss is technically distinguished from damage in fire insurance when all or any portion of the property insured is consumed. "Loss" designates that portion which is entirely consumed, while "damage" designates that part of the property which is not consumed, but remains after a fire in a damaged condition.

LOSS RATIO - Proportionate relationship of incurred losses to earned premiums expressed as a percentage.

LOSS RESERVE - For an individual loss, an estimate of the amount the insurer expects to pay for the reported claims. For total losses, estimates of expected payments for reported and unreported claims. May include amounts for loss adjustment expenses. [See also: INCURRED BUT NOT REPORTED (IBNR) and INCURRED LOSSES].

LOSSES OUTSTANDING - Losses (reported or not reported) which have occurred but have not been paid.

LOSSES PAID - The amounts paid to claimants as insurance claim settlements.

LUMP-SUM DEATH PAYMENT - A method of payment of the benefit in the event of the insured's death. In life insurance it is the payment of the face amount, in cash, less any loans outstanding or premiums due the insurer. It is paid to a designated beneficiary otherwise to the insured's estate.

MEDIAN - An average calculated by taking the middle number in a range of values. For example, in determining median income, the numbers are arranged by size and the middle number picked as the median number, assuming that there is an odd set of numbers. If there is an even set of numbers, then the two central numbers (the second and third if there are four numbers, or the 13th and 14th if there are 26 are added together and divided by two. Suppose there are 400 families and that 110 have an annual income of $10,000; 100 get $12,500; 100 get $13,750; 50 get $15,000; and 40 get $15,500. The median income is

$13,750. Suppose, instead, that there are 360 families and that 110 get an annual income of $10,000; 100 get an annual income of $12,500; 100 get an income of $13,750; and 50 get an annual income of $15,500. Since there is not a middle number, the second and third numbers ($12,500 and $13,750) are added together and divided by 2, yielding a median income of $13,125.

MERIT RATING - A system of rating whereby the insured with a good experience obtains benefits at a lower rate. Commonly used in automobile insurance where an accident-free driver for a certain period of time is given a discount from a listed rate he would otherwise pay. (See also: SAFE DRIVER RATING PLAN).

MODIFIED NO-FAULT - This is one type of no-fault automobile plan. The modified plan permits tort actions when the loss exceeds a pre-stated threshold. This threshold can either be based on the type of injury or the amount of medical expense. Most plans now in effect are of this type. [See also: NO FAULT (AUTOMOBILE) and THRESHOLD].

NEGLIGENCE - The omission to do something which a reasonable man would in similar circumstances have done, or the doing of something which a reasonable man in such circumstances would not do.

To recover damages against another in negligence there are three requisites:

(1) There must be a legal duty on the part of the defendant.

(2) The defendant must have failed to perform that duty.

(3) There must be damage caused to the plaintiff as a result of that failure to perform by the defendant.

- **ACTIONABLE NEGLIGENCE** (or legal negligence) - Negligence that results in damage to person or property thus giving right of action against the negligent person.

- **COLLATERAL NEGLIGENCE** - Negligence of one person in a group to another person in same group, e.g. one employee injures another.

- **COMPARATIVE NEGLIGENCE** - Laws in many jurisdictions diminish the amount recoverable in a negligence action by the percentage of negligence contributing to the loss by the person making the claim. In some jurisdictions, this is referred to as contributory negligence (laws correcting the original principle of contributory negligence). To illustrate a typical operation of such laws, a plaintiff is making a claim against a defendant in regard to damages to his automobile in an accident but it is found the plaintiff's negligence contributed 25 per cent to the accident and the defendant's negligence 75 per cent. The plaintiff would only have the right to collect 75 per cent of his damages since he himself contributed to the extent of 25 per cent. If there were a counter claim, the defendant could collect 25 per cent of his damages from the plaintiff. The remainder would be the responsibility of the defendant since he contributed 75 per cent toward the loss.

- **CONTRIBUTORY NEGLIGENCE** - At common law, a plaintiff is required to come in to court "with clean hands" (with no negligence on his own part). If by ordinary care, the accident could have been avoided or if some small negligence on the part of the plaintiff contributed to the accident, he has no right of recovery.

This is still the law in all areas where specific legislation has not been passed to change it. The legislation enabling the apportionment of liability, however, is sometimes called "contributory negligence laws" and in other areas "comparative negligence laws" which are, therefore, sometimes confusing.

- **CRIMINAL NEGLIGENCE** - Offences of negligence for which there are penalties provided in the Criminal Code.

- **GROSS NEGLIGENCE** - A complete lack of regard for the safety of others.

- **ORDINARY NEGLIGENCE** - Something less than the degree of care that would be exercised by an ordinary man in similar circumstances.

NET PREMIUMS WRITTEN (of a property or liability insurer) - This is the retained premium income. That is, total premium less any premiums ceded to a reinsurance company.

NO FAULT (AUTOMOBILE) - A common description of insurance which will pay the insured person and others involved in accidents without determining his degree of fault.

Examples are collision insurance and the limited accident benefits.

OMBUDSMAN - 1) A government official (as in Sweden or New Zealand) appointed to receive and investigate complaints made by individuals against abuses or capricious acts of public officials. 2) One that investigates reported complaints (as from students or consumers), reports findings, and helps to achieve equitable settlements.

OPPORTUNITY COST - A term that describes the benefits sacrificed by taking one course of action instead of another. It is an economic rather than an account concept, since it measures the costs of not doing something else, whereas accounting measures the costs of what is actually being done. The opportunity cost of taking action A - say, building a shopping centre - is the sacrifice of the profits that would have been made by taking action B - building an office tower instead. Similarly, the income from renting out a paid-for building should at least equal the opportunity cost of selling the building and using the proceeds to make another investment.

Opportunity cost is an important concept in making investment choices and allocating resources. It does not make sense to use a factor of production - land, labour, capital, technology - for a particular purpose, if it yields less than the opportunity cost of using the factor in some other way. Similarly, it doesn't make sense for a worker to take a job in one industry, when he or she could make more money for the same skills and responsibilities in another industry; opportunity cost is therefore an important consideration in setting wages in different industries. Opportunity cost identifies choices that have to be made, since every factor of production can be said to have an alternative use.

OVERRIDING COMMISSION - In insurance a fee or percentage of money which is paid by the insurer to an agent or general agent for premium volume produced by other agents in a given geographic territory.

PARENT COMPANY - Companies frequently operate in groups whereby one company may own or control subsidiaries. The company which owns or controls the others is the "parent" company. The subsidiaries are affectionately often referred to as "pup" companies.

PERFECT COMPETITION - A market in which the laws of supply and demand work to bring about the most efficient allocation of resources and the lowest possible prices. Such an economy is supposed to work according to a number of ideal rules: 1. There are large numbers of both buyers and sellers, with no one a large enough buyer or seller to influence prices of supplies. 2. Products are homogeneous or identical, so that the buyer will always buy at the lowest price, thus forcing all suppliers to have the same low price. 3. Buyers and suppliers have perfect knowledge of prices and products throughout the economy. 4. Perfect freedom of entry and exit exists, so that new suppliers face no barriers if they want to enter the market, while old suppliers are free to leave. 5. It is assumed that there are no transportation or other such costs. 6. There are no profits other than the minimum return to the factors of production, to ensure that they remain in the market.

Perfect competition is a concept used by economists in constructing theoretical models of economic systems. It does not exist in the real world, although free-market economists see it as the ideal towards which public policy should aim.

PERIL - This term refers to the causes of possible loss in the property field, for instance, fire, windstorm, collision and hail. In the casualty field, the term "hazard" is more frequently used.

POLICY - The actual contract of insurance with all its details.

POLICY CONDITIONS - The conditions under which the insurance is written. Policy conditions are generally set out in the special part of the policy under some such heading as "policy conditions", or "special conditions" or "statutory conditions". They deal generally with the arrangement between the insured and the insurance company in such matters as how the insurer shall be notified of a claim, special limits of liability or trustee agreements, the rights to other insurance without notice, assignments, subrogation, etc.

Note the distinction between this and the "Insurance Agreements" which specially set out the insurance afforded by the policy. In certain forms of policies, particularly in the more common automobile and fire insurance fields, the law specifically sets out the wordings to be required as part of the policy. In policies where these are applicable, the heading usually refers to "statutory conditions".

Where a policy has a typewritten endorsement which in effect affords greater coverage to the insured than it appears in the policy conditions, the court will interpret the policy as being in the broader terms since it assumes it more properly reflects the intentions of the party at the time the particular agreement was made.

Where an endorsement limits and affords less coverage than in the printed sections of the policy, there is a high degree of responsibility on the part of the insurance company to show that the limitation was known to the insured and accepted by him.

POLICY PERIOD - This is the period of time a policy is in effect (provides coverage). May be one year (annual) or three years (term). A covered loss must commence during the policy period.

POLICY YEAR - In annual policies, it is the policy period. In policies for longer periods, it is the current year between anniversary dates.

POLICYHOLDER - The party in whose name an insurance policy is issued.

POLITICAL RISKS - These risks include those changes made domestically or internationally by political bodies which affect the business community. For example: trade barriers, embargoes on raw materials, increased regulation, and judicial or legal decisions.

POOL - An organization of insurers or reinsurers through which particular types of risks are underwritten with premiums, losses and expenses shared in agreed ratios.

PORTFOLIO - 1) In transactions of reinsurance, it refers to all the risks of the reinsurance transaction. For example, if one company reinsures all of another's automobile business, let us say, the reinsuring company is said to assume the "portfolio" of automobile business and it is paid the total of the unearned premium on all the risks so reinsured (less some agreed commission). 2) Also refers to all the investments of a company.

PREDATORY PRICING - The practice of setting a relatively low price with the intent of damaging a competitor.

PREFERRED RISK - A risk of a class considered to be particularly desirable. (See also: DOG).

PREMIUM - The monetary consideration in contracts of insurance and reinsurance.

PREMIUM BASE - The ceding company's premiums (written or earned) to which the reinsurance premium rate is applied to produce the reinsurance premium.

PREMIUMS EARNED - When used as an accounting term, premiums earned describe the premiums written during a period plus the unearned premiums at the beginning of the period less the unearned premiums at the end of the period.

PRESENT VALUE - The value, in today's dollars, of a future inflow or outflow of funds in a proposed investment project. It is a tool used by corporations in assessing investment alternatives in which the future inflow and outflow of funds is discounted to reflect the time value of money.

PRIMARY BENEFITS - Primary benefits are paid regardless of other benefits to which the insured may be entitled. Benefits may be described as non-primary (secondary) if those benefits are paid only after other benefits to which the insured may be entitled have been taken into account. (See also: BENEFITS).

PRODUCT LIABILITY - The liability a merchant or a manufacturer may incur as the result of some defect in the product he has sold or manufactured.

PROOF OF LOSS - 1) A written statement of a claim giving the pertinent facts and data, usually in the form of an affidavit. 2) The written document signed by the insured, formally making a claim against the insurer.

PROPERTY INSURANCE - Provides financial protection against loss or damage to the insured's property caused by such perils as fire, windstorm, hail, explosion, aircraft, motor vehicles, vandalism, malicious mischief, riot and civil commotion, and smoke.

PRO RATA - In proportion.

PRO RATA CLAUSES - A provision in an insurance policy to pro rate the loss. It may be a provision to pro rate between the insured and the insurance company such as the co-insurance clause, the three-fourths loss clause, etc.

or it may be a provision to pro rate as between other insurance companies on the same risk.

As respect to the co-insurance clauses or proration with the insured, Driswold says "The pro rata principle, as applied to fire insurance, tends to equalize the proportion of the risk between the insurers and insured, by compelling the latter to bear a certain share of the loss in a ratio which the amount of insurance bears to the total value of the property at risk".

PUBLIC UTILITY - A corporation, often government-owned but sometimes privately owned, that provides an essential good or service to the public, usually under monopoly conditions. Examples include the provincial power companies, telephone companies, cable television, local transit services, and, in some instances, pipelines. Prices charged by public utilities are usually regulated. Provincial hydro companies, for example, may have to get approval for rate increases from provincial energy boards. Some utilities - for example, Bell Canada - are subject to a regulated utility rate of return, while others, such as cable operators, have to get government approval for rate increases.

PURE PREMIUM - 1) That part of the premium which is sufficient to pay losses and loss adjustment expenses but not including other expenses. 2) Also the premium developed by dividing losses by units of exposure disregarding any loading for commission, taxes and expenses.

RATE - A rate is the unit of charge made by the insurer against the property owner. It is based on the experience of the class of risk (incidence and frequency of loss), and is fixed at a level which will enable the insurance company to accumulate sufficient funds from all like risks to pay the losses for the fewer within the class who have losses, and at the same time provide sufficiently for the expenses of collecting and disbursing the fund.

RATE MAKING - The process of determining a rate. Basically it is done by special offices and a bureau which get all the statistics related to the particular peril and exposures, etc. and compute a rate.

RATED - A risk after having had a premium calculated for it is known to have been rated.

In life insurance, the company frequently charges a higher rate because of certain substandard medical situations and such policies written at the higher rate are known as "rated" policies.

RATING BUREAU - A non-profit organization of insurance companies formed to promulgate rates for its members and subscribers.

REAL WAGES - The actual purchasing power of wages, as opposed to money wages. If wages are increased 5 per cent but inflation also increases 5 per cent, then real wages have not changed at all. If wages increased 5 per cent but inflation increased 7 per cent, then real wages, or purchasing power, have actually declined; similarly, a 5 per cent wage increase when inflation is 3 per cent means that real wages have increased.

RECIPROCAL INSURANCE EXCHANGE - A form of unincorporated consumer cooperative insurer. The members (subscribers) exchange insurance with each other. Each is an insured and an insurer. The exchange is managed by an "attorney-in-fact" who, for a fee, manages the exchange under the terms and conditions of a "subscriber's agreement" which all members sign. It is also called an Inter-Insurance Exchange.

RECOVERY - The amount of loss which an insurance company gets back from reinsurance, salvage or by subrogation against the person responsible for the loss.

RECOVERIES - Amounts received from a reinsurer for a reinsured's losses.

REINSURANCE - 1) A method used by an insurance company to transfer part or all of its liability for an insurance contract to another insurance company (a reinsurer). Reinsurance is used to allow an insurer to underwrite higher limits in a single contract without retaining the entire limit of liability. It is also used to improve an insurers own financial and surplus position while meeting the demand for its policies. 2) The process whereby a company may share its risk with another, paying to such sharing company a portion of the premium it receives. Loss payments are made, by the company accepting the reinsurance, direct to the producing company, not the policyholder.

REINSURER - An organization which assumes the liability of another by way of reinsurance.

REPLACEMENT COST INSURANCE - Insurance which pays the full value of damaged or destroyed property without taking depreciation into consideration.

RESIDUAL MARKET - A term used to describe the market to which individuals seeking automobile insurance must turn once they are denied coverage in the regular market. [See also: (a) ASSIGNED RISK PLAN; (b) FACILITY PLAN].

RETROSPECTIVE RATING - A rating procedure that determines the final rate at the expiration of the policy. It is used very commonly in areas where the information required to ascertain a premium is not available at the beginning of the policy. E.g. a manufacturer may require products liability insurance but he does not know at the beginning of the year just how many different products he will make and how many items of each. Consequently he does not know the amount of his payroll. He will probably be asked to make an advance premium representing a rough approximation and when the final payroll is available at the end of the year, an adjustment is made by either paying the additional premium that was used or getting a refund on the unused part of the premium.

It is also used in some automobile situations particularly in hazardous risks when the premium will depend upon the particular experience during the course of the year with the insurance company taking the responsibility for anything below or above the minimum and maximum premium.

RESERVE - See: CLAIM RESERVE and UNEARNED PREMIUM RESERVE.

RISK - 1) Defined variously as uncertainty of loss, chance of loss, or the variance of actual from expected results. However defined, its existence is the reason people buy insurance. 2) The subject matter of an insurance contract, e.g., the building, cargo, or liability exposure insured. (Lenz)

SAFE DRIVER RATING PLAN - A merit rating program for private passenger cars whereby insureds with clean driving records qualify for lower automobile insurance premiums, and insureds who have an accident or conviction history pay higher premiums. The amount of premium is regulated by a point system, which assigns a certain number of points for accidents and traffic violations in which the insured is involved during a stated period--usually three years. (See also: MERIT RATING).

SEASONAL UNEMPLOYMENT - Unemployment caused by climatic and other conditions each year. Such unemployment is predictable in certain industries, such as tourism, forestry, fishing and Great Lakes shipping; and less predictable than it used to be in others, such as construction. There is also seasonal employment - in the retail industry at Christmas, for example.

SELF-INSURER - An individual, partnership or corporation who retains all or part of the risk for its own account and purchases an excess of loss cover to protect itself in the event of a catastrophe.

SOCIAL COSTS - The cost of private actions, such as the production of goods or services, that are paid for by the public. Examples include the pollution of the environment and the health-care costs of injured or ill workers.

SOCIAL INFLATION - The increasing of insurance losses caused by higher jury awards, more liberal treatment of claims by legislated rises in benefit levels and new concepts of tort and negligence, among others.

STANDARD FORM - A form, be it a policy or some other document used to write insurance, which has been adopted and is used by a large number of companies, or has been promulgated by a rating bureau. The use of standard forms does away with much of the need to scrutinize every word of a policy form, since the standard has been examined and tried by many before.

STANDARD POLICY - A policy generally in use and in some lines of insurance a policy prescribed by law.

STANDARD PROVISIONS - The essential parts of an insurance contract which are the same as are commonly used in the industry.

STATUTORY ACCOUNTING PRINCIPLES (SAP) - Those principles required by law which must be followed by insurance companies in submitting their financial statements to provincial insurance departments. Such principles differ from generally accepted accounting principles (GAAP) in some important respects, e.g., SAP requires that expenses must be recorded immediately and cannot be deferred to track with premiums as they are earned and taken into revenue. (Hill)

STATUTORY PROVISION - A provision that is required by law to be included in an insurance contract. (See also: STANDARD PROVISIONS).

SUBROGATION - When a company pays a loss for which some person other than the policyholder is responsible, the company's right to recover its loss from the guilty party is the right of subrogation.

SURETY - The underwriter who guarantees something under a bond.

TERM - The period of time from the inception to the termination of an insurance contract.

THIRD PARTY - The claimant under liability insurance. So called because he is not one of the two parties -- insured and insurer -- who enters into the insurance contract which pays the claim.

THIRD PARTY INSURANCE - A type of insurance in which the insured is indemnified with respect to any loss which he might suffer as a result of his legal liability to others arising out of the peril against which the particular insurance is written.

THRESHOLD (in no-fault automobile coverage) - No-fault automobile insurance plans are designed to exempt the insured from tort liability actions brought about by automobile accidents. Yet, under most plans, the injured party can sue once the expenses exceed a certain level or if certain types of injuries occurred. This level is referred to as the threshold and differs among various state plans. However, under the personal auto policy coverage is provided automatically if the driver enters a no-fault state. [See: (a) NO-FAULT (AUTOMOBILE); (b) MODIFIED NO FAULT].

TIME VALUE OF MONEY - A concept used in investment analysis, according to which a specific amount of money in the hand at present is worth more than the same amount of money in the future, because money available now can be invested and earn a return. Thus $100 invested today at 10 per cent would be worth $110 a year from now, and hence would be worth more than $100 received a year from now.

TORT - A tort is an intentional or unintentional wrong (other than breach of contract) for which a civil action can be brought. It involves the violation of another's natural right, and is considered by law to be a civil injury. Proof of such breach of a legal duty owed the injured party by the at-fault party can result in money damages being awarded.

TORT FEASOR - The party that commits a tort.

TORT LIABILITY REFORM - Over the years there has been considerable concern over the effectiveness of the tort liability system. Many changes have been proposed including no-fault plans. The tort liability reform concept focuses upon amending the system to eliminate the problems. It suggests statutes be reviewed, arbitration for small claims, procedural reforms to improve trials, review of laws relating to negligence and intent, reasonable cost for legal counsel, and reformation of the court system. This type of widespread reform would apply to all tort liability activities not just automobile and is intended to improve the system.

TRUE NO-FAULT AUTOMOBILE INSURANCE PLAN - This plan is designed to totally eliminate tort liability from automobile claims. [See also: (a) NO FAULT AUTOMOBILE; (b) MODIFIED NO-FAULT].

UNDERWRITER - The insurance company or group that underwrites or insures a particular risk. It is also used to identify the individual in the company who accepts or rejects business in the particular line he specializes in, and in this way, chooses risks his principals are prepared to consider.

UNDERWRITING - The process of determining the acceptability of a risk on its own merits. In contrast to the assignment of a risk to a class based on general criteria, the underwriting process involves an evaluation of the individual and possibly unique characteristics of each risk.

UNEARNED PREMIUM - That part of the premium which has not been used or earned, and which must be returned to the insured in the event of cancellation of policy by the company prior to its full term.

UNEARNED PREMIUM RESERVE - Insurance premiums are paid in advance. A company, however, "earns" the premium only as fast as time elapses. Yesterday's premium is earned. Tomorrow's premium is unearned. The unearned premium reserve is the sum of all the unearned premiums of all the unexpired policies that a company has on its books.

UNIFORM PROVISIONS - The specific wording in certain types of insurance is set out by law and insurance companies are required to write that type of insurance on that particular form. This is known as a "uniform provision". [See also: (a) STANDARD PROVISIONS; (b) STATUTORY PROVISIONS].

UNINSURED AUTOMOBILE - An automobile which is not covered by any insurance agreement.

UNINSURED MOTORIST - This means the driver of an automobile for which there is no current automobile liability insurance. Under uninsured motorists' coverage an uninsured motorist also includes a hit-and-run motorist as well as one that has insurance but whose insurer is insolvent.

UNINSURED MOTORISTS' INSURANCE - This coverage was designed to provide payment to the insured, family members, and their passengers for injuries caused by negligent uninsured motorists as defined in the coverage.

UNSATISFIED JUDGMENT FUND - A fund created to reimburse persons injured in automobile accidents who cannot collect damages awarded to them because the responsible party is either insolvent or uninsured. Such funds are often financed by an addition to the regular automobile registration fee, and will only pay unsatisfied judgments up to fixed limits.

VARIABLE COST - A cost that goes up or down, depending on whether production goes up or down. Examples include the costs of raw materials, parts, and labour directly involved in the production process. Such costs are also known as operating costs, as opposed to fixed costs or overhead. (See also: FIXED COST).

VOID OR VOIDABLE - A contract is void when it is destitute of all legal effect. A voidable contract is one which can be made void at the option of one of the parties.

WAIVER - An intentional relinquishing of a known right. A waiver under a policy is required to be clearly expressed and in writing.

NOTE: Definitions from the following publications have been used with permission:

(1) Insurance Words and their Meanings: A Glossary of Property and Casualty Insurance Terms/by Gerald R. Heath and twelve other authorities. - 12th edition/edited by Robert W. Strain. - Indianapolis: Rough Notes, c1978 repr. 1979.

(2) Glossary of Insurance Terms and Legal Terms Used in Insurance Claims/by W. A. Jennings. - Toronto: Insurance Institute of Canada, c1969 repr. 1982.

APPENDIX IX

COMMENT ON THE ECONOMIC COST OF ACCIDENTS

by Saskia Oltheten Matheson

In 1982, the United States Department of Transportation estimated the economic cost of traffic injuries for each abbreviated injury scale (A.I.S.)[1] level established.[2] The A.I.S. figures are presented in Table 1 below:

TABLE 1
GROSS UNITED STATES SOCIETAL COST RESULTING FROM AUTOMOBILE ACCIDENT INJURIES IN 1984
ABBREVIATED INJURY SCALE LEVEL

FACTOR	1	2	3	4	5	FATAL
Costs	$ 209	$1,735	$ 3,973	$12,093	$122,249	$ 1,726
Productivity Losses	123	699	1,974	16,293	86,978	298,450
Legal Court Costs	670	735	3,362	6.485	9,909	16,876
Coroner						212
Emergency Costs	77	144	160	253	318	365
Insurance Expenses	673	673	673	15,779	15,779	15,779
Government Aid Costs	93	94	115	584	595	896
AVERAGE TOTAL COST/VICTIM	$1,845	$4,080	$10,257	$51,487	$235,828	$334,304
TOTAL COST** ALL VICTIMS ($millions)	$4,212	$1,337	$ 1,195	$ 697	$ 1,336	$ 14,691

**This figure is calculated by multiplying the average total cost per victim by the number of victims in each Abbreviated Injury Scale level.

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[1] As expected, the higher the number the more severe the injury; e.g., 1 is minimal and 5 is life-threatening.

[2] U.S. Department of Transportation, The Economic Cost to Society of Motor Vehicle Accidents (Washington: D.O.T., 1982). Figures were adjusted for inflation in order to show costs in 1984 dollars; U.S. Department of Transportation, Compensating Auto Accident Victims: A Follow-up Report on No-Fault Auto Insurance Experiences (Washington: D.O.T., 1985).

As can be seen from Table 1, the 1984 data suggest that the total economic cost of traffic accidents in the United States was approximately $23.5 billion.[3]

Assuming that the Canadian experience is similar to the American experience, and given the fact that Ontario's population is approximately 1/25 of that of the United States, the societal cost of traffic accidents in Ontario is approximately $1-billion each year (based on American dollars).

In 1982, Richard Slocum of the Policy Planning and Research Division, Ontario Ministry of Transportation and Communications, attempted to estimate the cost of motor vehicle accidents in Ontario.[4] There are some problems with the model used. It assumes that there is no measurable loss in productivity resulting from fatalities. The model treats all injured females injured as homemakers. It expressly understates legal costs, court fees and health care costs. Nevertheless, with some adjustments, the model is helpful in approximating the economic value of the resources lost in motor vehicle accidents.

Slocum breaks down costs into seven compartments:

(a) property costs;

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[3] Figure obtained by adding the numbers in bottom line of the Table. The exact figure is $23,468,000,000.

[4] Richard Slocum, Ontario Motor Vehicle Accidents: An Economic Appraisal. (Toronto: Ontario Ministry of Transportation and Communications, Policy Planning and Research Division, 1982).

(b) health care costs;

(c) productivity losses;

(d) funeral losses;

(e) insurance operating costs;

(f) legal and court fees; and

(g) investigation costs.

Property cost is the value of physical damage to vehicles and to the environment (roads, buildings, etc.). In 1985, the average property damage accident cost was almost $3,000 per accident.[5] Health care costs include those costs which are paid by O.H.I.P. and privately. The only available figures are contained in a survey conducted by the Ministry of Health involving 525 victims of motor vehicle accidents injured in 1975 and 1976 and admitted to hospital.[6] Because accident victims do not always go to hospital, even if they are injured, the figures tend to understate real costs. Slocum's model, therefore, only applies the average health care cost to hospitalized victims (55% of all those injured). The adjusted 1985 figure for average health care costs per injured victim is $853.[7]

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[5] Slocum uses the M.T.C. figures from 1980 Ontario Motor Vehicle Accidents Facts (Toronto: M.T.C., 1981) for property damage ($357,640,284). He divides that figure by the total number of reportable accidents (196,501). The figure is compiled from estimates made by police at the scene of the accident and entered on the accident report. These estimates are not foolproof. Further, the figure does not include accidents with property damage of less than $400, since that was the minimum reporting limit at the time. For the adjusted 1985 figure, the property damage estimate ($547,518,951) and the number of reportable accidents (189,750) are taken from Ontario Road Safety Annual Report, 1985. The same limitations apply to this figure as apply to Slocum's figures with the exception that the minimum reporting level was increased to $700 in 1985.

[6] Ontario Ministry of Transportation and Communications, Policy Planning and Research Division, Injury: An Ontario Survey of the Societal and Personal Costs of Hospitalized Motor Vehicle Accident Victims (Toronto: The Policy Planning and Research Division, Ontario Ministry of Transportation and Communications and Ontario Ministry of Health, 1981), for the Interministerial Task Force on Motor Vehicle Injuries (Toronto: The Task Force, 1981).

Productivity loss presents the greatest difficulty in the Slocum model. The Ministry of Health's survey shows that the average number of work days lost for hospitalized motor vehicle accident victims is 15.7, while the number of housework days lost is 14.4. To estimate lost production, Slocum divides 15.7 by a five-day work week and multiplies that figure by the average weekly wage. This yields the loss per injured male victim. To obtain a loss figure for injured females, Slocum divides the 14.4 days of housework loss by the five-day working week and multiplies the result by the average weekly wage or females in Ontario.[8] Slocum then multiplies the two resulting productivity loss figures by the proportion of injured who are male (59%) and female (41%). This yields an overall average productivity loss.

(Study Director: Richard Slocum).

[7] The cost, calculated from Injury was $361 for 1975. Slocum updated the figure to $596 for 1980. When adjusted to 1985 dollars the figure for health care costs is $853. (Inflation increased prices by 43% between 1980 and 1985, according to the Statistics Canada Consumer Price Index).

[8] The average weekly wage for females is used to estimate the opportunity cost of housework. The implied wages from housework must be enough to keep homemakers from going into the labour force. If housework were worth less, women would go into the labour force and pay someone else to do the tasks; if it were worth more, women would leave the labour force and drive up the average wage.

Several problems arise. The Slocum model assumes all injured and hospitalized women were homemakers. The fact that women made up 40% of the labour force in 1980 is not taken into account in calculating the average weekly wage and applying it. In addition, some might argue that housework days lost should not be calculated on the basis of a five-day week, but rather on the basis of a seven-day housework week. Adjusting the Slocum figures to remedy the problems referred to, and updating them to 1985, results in an overall production loss of $1,357 per victim.[9] Updating Slocum's figures to 1985 results in an average wage loss of $1,160 or $197 lower than the adjusted figure.[10]

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[9] From Injury we know that hospitalized victims report an average of 15.7 work days lost and 14.4 housework days lost. The average weekly wage for Ontario was $309 in 1980 and the average weekly wage for females was $202. Slocum multiplied weekly salary by days lost and divided through by 5 working days:
15.7 x $309 ÷ 5 = $970 per injured male victim; and
14.4 x $202 ÷ 5 = $582 per injured female victim.

Multiplying these figures by the proportion of victims of either sex produces the following result:
($970 x .59) + ($582 x .41) = $811 per injured victim.

The labour participation ratio for women aged 15 and over in Ontario in 1985 was 57.9%. Of the 41% of accident victims who were female, 23.7% (57.9% x 41%) should be included in the work force.

It is assumed that women not in the labour force are homemakers. It is also assumed that men not in the labour force would have indicated "0" work days lost, rather than a certain number of housework days lost and, thus, are implicitly included in the averages. This may overstate the number of female homemakers and understate the number of male homemakers. It is assumed that these figures will balance each other out. The average weekly wage in Ontario is $455.33, which includes both male and female workers. The figure is used for both workers and homemakers. The new equations are as follows:
15.7 x $455.32 ÷ 5 = $1,430 per injured worker.
14.4 x $455.32 ÷ 7 = $ 936 per injured homemaker.
Workers = 59% (males) + 26.2% (female workers) = 85.2%
Homemakers = 14.8%

The Slocum model does not take into account production losses arising from fatalities. The U.S. Department of Transportation study estimated the per fatality loss at almost $300,000 in 1984.[11] This is the best estimate available. Adjusting the U.S. Department of Transportation's figures to 1985 dollars yields an estimated $310,408 per fatality productivity loss figure.[12]

To calculate funeral costs, Slocum compares the expenditure from the Inquiry survey with a present value calculation of funeral costs at the expected time of

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Average loss per victim = ($1,430 x .852) + (936 x .148) = $1,357.

[10] The overall difference in production loss would be $11,828,461 less than the adjusted figure.

[11] U.S. Department of Transportation, Compensating Auto Accident Victims, 1985.

[12] The U.S. figures are expressed in U.S. dollars. (This figure is used to account for the possibility of a higher American average wage).

natural death.[13] The adjusted 1985 figure is $2,131.46 per fatality.

Slocum does not regard compensation payments made by insurers to victims as losses. In the Slocum model, those payments have already been calculated as health care costs, productivity costs and so on. Compensation paid by an insurer is viewed as a transfer of money back to the victim from amounts previously transferred in the form of premiums paid by all potential victims to insurers).

Resources are also used in this insurance transfer system. In 1985 figures, the earned premiums for all private passenger automobile coverages in Ontario (excluding farmers) amounted to $1,669,471,034.[14] Operating costs vary; however, a reasonable average over the past five years is 33.3%.[15] When that factor is applied to earned premiums, the result is a private passenger automobile total operating cost of $555,933,854.[16]

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[13] Although everyone eventually pays funeral costs, the estimated average time until natural death occurred for the sample group was 35-40 years. Assuming a real interest rate (interest rate less inflation) of 6%, the amount needed in 1980 to produce $1,650 in 40 years is $160.00. The amount was so minor that Slocum ignored the offset. Updating Slocum's figure to 1985 dollars results in funeral costs of $2,361 per fatality. The 1985 offset, i.e. the money required now to provide funeral expenses in 40 years, is $229.54. Thus, the extra money spent is $2,131.46.

[14] Insurance Bureau of Canada, Automobile Insurance Experience ("Green Book"), 1985.

[15] From the "Green Book", we know that operating expenses outside of claims adjustment expenses were 23.3% for 1985. The estimated claims adjustment cost is 11% of premiums (see Chapter 16 on Transaction Costs). The total figure for 1985 equals 24.3%. Premium taxes were not included since they represent a transfer, not a resource expenditure.

Slocum's estimate of legal and court fees, updated to 1985, results in a cost of $250 per injured victim. His calculations do not take into account property damage accidents or fatalities. The figure is thus a lowest cost estimate.

Slocum included in his calculations the cost of police investigations of accidents (mostly a time cost). In 1985 terms, Slocum's conclusions were that police investigations represent a cost of $34 for a property damage accident, $50 for an injury-producing accident and $319 for a fatality.[17]

The economic cost of motor vehicle accidents in Ontario can only be approximated. Slocum provides the

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[16] Operating costs will, of course, increase when premiums paid by farmers ($17,178,192), commercial vehicles ($147,313,616), motorcycles ($27,011,879) and snowmobiles ($8,496,475) are considered.

[17] Slocum uses a $12 per hour wage rate to cost the time spent on an investigation. The figures for hours spent come from O.P.P. data. For 1980, the costs are:

Property damage accident	(2.0 hours x $12)	$ 24
Injury accident	(2.9 hours x $12)	$ 35
Fatal accident	(18.6 hours x $12)	$223

Using the 43% adjustment for inflation, investigation costs per accident in 1985 dollars are $34 (P.D.), $50 (Injury) and $319 (Fatal). According to the Ontario Road Safety Annual Report, there were 114,874 property damage accidents, 73,840 injury accidents and 1,036 fatal accidents reported in 1985. Multiplied by the per accident investigation costs, this led to total costs of: (114,874 x $34) + (73,840 x $50) + (1,036 x $319) = $7,928,200.

best available data. Updating Slocum's figures and correcting the model in areas previously discussed produced an economic cost breakdown summarized in Table 2 below:

TABLE 2

ECONOMIC COST OF MOTOR VEHICLE ACCIDENTS IN ONTARIO -- 1985

Property damage		$547,518,951
Health care	(109,169 x 55% x $853)	51,216,636
Production Loss	(109,169 x 55% x $1,357)	81,478,283
	(1,191 x $310,408)	369,695,928
Funeral costs	(1,191 x $ 2,131.46)	2,538,569
Insurance operating costs		622,533,908
Legal & court fees court fees	(109,169 x .55 x $250)	15,010,738
Accident investigation	(114,874 x $ 34)	3,905,716
	(73,840 x $ 50)	3,692,000
	(1,036 x $319)	330,484
	TOTAL COST:	$1,697,921,213

APPENDIX X

ONTARIO
STANDARD
AUTOMOBILE POLICY

S.P.F. No. 1

(Owner's Form)

PLEASE READ THIS CAREFULLY

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INSURING AGREEMENTS

Now Therefore in consideration of the payment of the premium specified and of the statements contained in the application **and subject to the limits, terms, conditions, provisions, definitions and exclusions herein stated** and subject always to the condition that the Insurer shall be liable only under the section(s) or subsection(s) of the following Insuring Agreements A, B, C for which a premium is specified in item 4 of the application and no other

SECTION A – THIRD PARTY LIABILITY

The Insurer agrees to indemnify the insured and, in the same manner and to the same extent as if named herein as the insured, every other person who with his consent personally drives the automobile, or personally operates any part thereof, against the liability imposed by law upon the insured or upon any such other person for loss or damage arising from the ownership, use or operation of the automobile and resulting from

BODILY INJURY TO OR DEATH OF ANY PERSON OR DAMAGE TO PROPERTY

The Insurer shall not be liable under this section,

(a) — deleted

(b) — deleted

(c) — deleted

(d) for loss of or damage to property carried in or upon the automobile or to any property owned or rented by, or in the care, custody or control of any person insured by this section or

(e) — deleted

(f) — deleted

(g) for any amount in excess of the limit(s) stated in section A of item 4 of the application, and expenditures provided for in the Additional Agreements of this section, subject always to the provisions of the section of the Insurance Act (Automobile Insurance Part) relating to the nuclear energy hazard or

(h) for any liability arising from contamination of property carried in the automobile.

See also General Provisions, Definitions, Exclusions and Statutory Conditions of this Policy

ADDITIONAL AGREEMENTS OF INSURER

Where indemnity is provided by this section the Insurer shall,

(1) upon receipt of notice of loss or damage caused to persons or property, serve any person insured by this policy by such investigation thereof, or by such negotiations with the claimant, or by such settlement of any resulting claims, as may be deemed expedient by the Insurer, and

(2) defend in the name and on behalf of any person insured by this policy and at the cost of the Insurer any civil action which may at any time be brought against such person on account of such loss or damage to persons or property, and

(3) pay all costs taxed against any person insured by this policy in any civil action defended by the Insurer and any interest accruing after entry of judgment upon that part of the judgment which is within the limit(s) of the Insurer's liability, and

(4) in case the injury be to a person, reimburse any person insured by this policy for outlay for such medical aid as may be immediately necessary at the time of such injury, and

(5) be liable up to the minimum limit(s) prescribed for that province or territory of Canada in which the accident occurred, if that limit(s) is higher than the limit(s) stated in section A of item 4 of the application, and

(6) not set up any defense to a claim that might not be set up if the policy were a motor vehicle liability policy issued in the province or territory of Canada in which the accident occurred.

AGREEMENTS OF INSURED

Where indemnity is provided by this section, every person insured by this policy

(a) by the acceptance of this policy, constitutes and appoints the Insurer his irrevocable attorney to appear and defend in any province or territory of Canada in which action is brought against the insured arising out of the ownership, use or operation of the automobile;

(b) shall reimburse the Insurer, upon demand, in the amount which the Insurer has paid by reason of the provisions of any statute relating to automobile insurance and which the Insurer would not otherwise be liable to pay under this policy.

SECTION B — ACCIDENT BENEFITS

The Insurer agrees to pay to or with respect to each insured person as defined in this section who sustains bodily injury or death by an accident arising out of the use or operation of an automobile:

SUBSECTION 1 — MEDICAL, REHABILITATION AND FUNERAL EXPENSES

(1) All reasonable expenses incurred within four years from the date of the accident as a result of such injury for necessary medical, surgical, dental, chiropractic, hospital, professional nursing and ambulance service and for any other service within the meaning of insured services under **The Health Insurance Act** and for such other services and supplies which are, in the opinion of the physician of the insured person's choice and that of the insurer's medical advisor, essential for the treatment, occupational retraining or rehabilitation of said person, to the limit of $25,000 per person.

(2) Funeral expenses incurred up to the amount of $1,000 in respect of the death of any one person.

The Insurer shall not be liable under this subsection for those portions of such expenses payable or recoverable under any medical, surgical, dental, or hospitalization plan or law or, except for similar insurance provided under another automobile insurance contract, under any other insurance contract or certificate issued to or for the benefit of, any insured person.

SUBSECTION 2 — DEATH BENEFITS AND LOSS OF INCOME PAYMENTS

Part I — Death Benefits

A. Subject to the provisions of this Part, for death that ensues within 180 days of the accident or within 104 weeks of the accident if there has been continuous disability during that period, a payment — based on the status at the date of the accident of the deceased in a household where a spouse or dependants survive — of the following amounts:

Head of the Household	$10,000
Spouse of the Head of the Household	10,000
Dependant within the meaning of sub-subparagraph (b) of subparagraph 3 of paragraph B	2,000

In addition, with respect to death of the head of the household, where there are two or more survivors — spouse or dependants — the principal sum payable is increased $1,000 for each survivor other than the first.

B. For the purposes of this Part,

(1) "Spouse of the head of the household" means the spouse with the lesser income from employment in the twelve months preceding the date of the accident.

(2) "Spouse" means either of a man and woman who,
- **(a)** are married to each other,
- **(b)** are married to each other by a marriage that is voidable and has not been voided by a judgment of nullity, or
- **(c)** have gone through a form of marriage with each other, in good faith, that is void and are cohabiting or have cohabited within the preceding year,

and includes,
- **(d)** either of a man and woman not being married to each other who have cohabited,
  - (i) continuously for a period of not less than five years, or
  - (ii) in a relationship of some permanence where there is a child born of whom they are the natural parents,

  and have so cohabited within the preceding year.

(3) "Dependant" means,
- **(a)** the spouse of the head of the household who resides with the head of the household;
- **(b)** a person,
  - (i) under the age of 18 years who resides with and is principally dependent upon the head of the household or the spouse of the head of the household for financial support,
  - (ii) 18 years of age or over who, because of mental or physical infirmity, is principally dependent upon the head of the household or the spouse of the head of the household for financial support, or
  - (iii) 18 years of age or over who, because of full-time attendance at a school, college or university is principally dependent upon the head of the household or the spouse of the head of the household for financial support, or

- **(c)** a parent or relative,
  - (i) of the head of the household,

    or
  - (ii) of the spouse of the head of the household,

  residing in the same dwelling premises and principally dependent upon the head of the household or the spouse of the head of the household for financial support.

(4) The total amount payable shall be paid to a person who is the head of the household or the spouse of the head of the household, as the case may be, if that person survives the deceased by at least 30 days.

(5) The total amount payable with respect to death where no head of the household or spouse survives the deceased by at least 30 days shall be divided equally among the surviving dependants.

(6) No amount is payable on death, other than incurred funeral expenses, if no head of the household or dependant survives the deceased by at least 30 days.

Part II — Loss of Income

Subject to the provisions of this Part, a weekly payment for the loss of income from employment for the period during which the insured person suffers substantial inability to perform the essential duties of his occupation or employment, provided,
- **(a)** such person was employed at the date of the accident,
- **(b)** within 30 days from the date of the accident the insured person suffers substantial inability to perform the essential duties of his occupation or employment,
- **(c)** no payments shall be made for any period in excess of 104 weeks except that if, at the end of the 104 week period, it has been established that such injury continuously prevents such person from engaging in any occupation or employment for which he is reasonably suited by education, training or experience, the Insurer agrees to make such weekly payments for the duration of such inability to perform the essential duties.

Amount of Weekly Payment — The amount of a weekly payment shall be the lesser of,
- **(a)** $140 per week; or
- **(b)** 80 percent of the insured person's gross weekly income from employment, less any payments for loss of income from employment received by or available to such person under,
  - (i) the laws of any jurisdiction,
  - (ii) wage or salary continuation plans available to the person by reason of his employment, and
  - (iii) Part III of this Subsection 2,

  but no deduction shall be made for any increase in such payment due to a cost of living adjustment subsequent to the insured person's substantial inability to perform the essential duties of his occupation or employment or for the first two weeks of such substantial inability.

For the purposes of this Part,

(1) there shall be deducted from an insured person's gross weekly income any payments received by or available to him from part-time or other employment or occupation subsequent to the date of the accident;

(2) a principal unpaid housekeeper residing in the household not otherwise engaged in occupation or employment for wages or profit, if injured, shall be deemed disabled only if completely incapacitated and unable to perform any of his or her household duties and, while so incapacitated, shall receive a benefit at the rate of $70 per week for not more than 12 weeks;

(3) a person shall be deemed to be employed,
- **(a)** if actively engaged in an occupation or employment for wages or profit at the date of the accident; or
- **(b)** if 18 years of age or over and under the age of 65 years, so engaged for any six months out of the preceding 12 months,

(4) a person receiving a weekly payment who, within 30 days of resuming his occupation or employment is unable to continue such occupation or employment as a result of such injury, is not precluded from receiving further weekly payments,

(5) except for the first two weeks of disability, where the payments for loss of income payable hereunder, together with payments for loss of income under another contract of insurance other than a contract of insurance relating to any wage or salary continuation plan available to an insured person by reason of his employment, exceed the actual loss of income of the insured person, the Insurer is liable only for that proportion of the payments for loss of income stated in this policy that the actual loss of income of the person insured bears to the aggregate of the payments for loss of income payable under all such contracts.

Part III — Supplemental Benefits Respecting Accidents Occuring in Quebec

A. For the purposes of this Part,

(a) "accident" means an event occurring in Quebec resulting in damage caused by an automobile, or by the use of an automobile, or by the load of an automobile, including damage caused by a trailer;

(b) "bodily injury" means physical, psychological or mental injury including death as well as damage to the clothing worn by the victim at the time of the accident;

(c) "resident of Ontario" means any person,

(i) who is authorized by law to be or to remain in Canada and is living and ordinarily present in Ontario, and

(ii) who meets the criteria prescribed in Division II of O.C. 374-78 made under the **Automobile Insurance Act** (Quebec), which apply with necessary modifications,

but does not include a person,

(iii) who is merely touring, passing through or visiting Ontario, or

(iv) who is, at the time of an accident in Quebec, the owner or driver of, or a passenger in, an automobile registered in Quebec;

(d) "person insured in Quebec" means a resident of Ontario who is,

(i) any person while an occupant of the described automobile or of a newly acquired or temporary substitute automobile as defined in this policy,

(ii) the insured and, if residing in the same dwelling premises as the insured, his or her spouse and any dependent relative of either while an occupant of any other automobile,

(iii) any person, not the occupant of an automobile, who is struck by the described automobile or a newly acquired or temporary substitute automobile as defined in this policy,

(iv) the named insured, if an individual, and his or her spouse and any dependent relative residing in the same dwelling premises as the named insured, not the occupant of an automobile who is struck by any other automobile,

(v) if the insured is a corporation, unincorporated association, or partnership, any employee or partner of the insured for whose regular use the described automobile is furnished, and his or her spouse and any dependent relative of either, residing in the same dwelling premises as such employee or partner, while an occupant of any other automobile,

(vi) any employee or partner of the insured, for whose regular use the described automobile is furnished, and his or her spouse and any dependent relative of either, residing in the same dwelling premises as such employee or partner, while not the occupant of an automobile who is struck by any other automobile, and

(vii) any other person who is,

a. the occupant of an automobile, or

b. not being the occupant of an automobile, is struck by an automobile,

driven by a person insured in Quebec as defined in sub-subparagraphs i to vi of this subparagraph.

B. With respect to bodily injury, as a result of an accident, to a person insured in Quebec the Insurer agrees to make payments under this Part in the same amount and form and subject to the same conditions as if such person were a resident of Quebec as defined in the **Automobile Insurance Act** (Quebec) and the regulations made under that Act and entitled to payments under that Act and those regulations.

SUBSECTION 3 — UNINSURED MOTORIST COVER

All sums that

(a) a person insured under the contract is legally entitled to recover from the owner or driver of an uninsured automobile or unidentified automobile as damages for bodily injuries resulting from an accident involving an automobile;

(b) any person is legally entitled to recover from the owner or driver of an uninsured automobile or unidentified automobile as damages for bodily injury to or the death of a person insured under the contract resulting from an accident involving an automobile; and

(c) a person insured under the contract is legally entitled to recover from the identified owner or driver of an uninsured automobile as damages for accidental damage to the insured automobile or its contents, or to both the insured automobile and its contents, resulting from an accident involving an automobile.

1. **Definitions:**

For the purposes of this subsection,

(a) "insured automobile" means the automobile as defined or described under the contract;

(b) "person insured under the contract" means,

(i) in respect of a claim for damage to the insured automobile, the owner of the automobile,

(ii) in respect of a claim for damage to the contents of the insured automobile, the owner of the contents,

(iii) in respect of a claim for bodily injuries or death,

a. any person while an occupant of the insured automobile,

b. the insured and, if residing in the same dwelling premises as the insured, his or her spouse and any dependent relative of either,

(1) while an occupant of an uninsured automobile, or

(2) while not the occupant of an automobile or of railway rolling stock that runs on rails, who is struck by an uninsured or unidentified automobile,

c. if the insured is a corporation, unincorporated association or partnership, any director, officer, employee or partner of the insured for whose regular use the insured automobile is furnished, and, if residing in the same dwelling premises as such person, his or her spouse and any dependent relative of the person or the spouse,

(1) while an occupant of an uninsured automobile, or

(2) while not the occupant of an automobile or of railway rolling stock that runs on rails, who is struck by an uninsured or unidentified automobile,

where such director, officer, employee or partner or his or her spouse is not the owner of an automobile insured under a contract;

(c) "unidentified automobile" means an automobile with respect to which the identity of either the owner or driver cannot be ascertained;

(d) "uninsured automobile" means an automobile with respect to which neither the owner nor driver thereof has applicable and collectible bodily injury liability and property damage liability insurance for its ownership, use or operation, but does not include an automobile owned by or registered in the name of the insured or his or her spouse.

2. **Qualification of Dependent Relative**

Where a dependent relative referred to in subparagraph (iii) of paragraph (b) of Clause 1,

(a) is the owner of an automobile insured under a contract; or

(b) sustains bodily injuries or dies as the result of accident while the occupant of his own uninsured automobile,

such relative shall be deemed not to be a dependent relative for the purposes of this subsection 3.

The following terms, conditions, provisions, exclusions and limits prescribed by the Regulations made under Section 231(4) of The Insurance Act apply to the coverage under this Subsection of this Section B.

3. **Limits and Exclusions**

(1) The Insurer shall not be liable to make any payment,

(a) for any amount in excess of the minimum limits for automobile liability insurance in the jurisdiction in which the accident occurs regardless of the number of persons injured or killed or the damage to the automobile and contents, and in no event shall the Insurer be liable for any amount in excess of the minimum limits set out in section 219 of **The Insurance Act**;

(b) where a person insured under the contract is entitled to recover money under any valid policy of insurance other than money payable on death, except for the difference between such entitlement and the relevant minimum limits determined under paragraph (a);

(c) where the person insured under the contract is entitled to recover money under the third party liability section of a motor vehicle liability policy;

(d) to any person involved in an accident in a jurisdiction in which a valid claim may be made for such payment against an unsatisfied judgment or similar fund;

(e) for any loss or damage caused directly or indirectly by radioactive material; or

(f) in respect of damages for accidental damage to the insured automobile and its contents, for the first $100 of any loss in any one occurrence nor any amount in excess of $25,000.

(2) Where by reason of any one accident, liability results from bodily injury or death and from damage to the insured automobile or its contents,

(a) claims arising out of bodily injury or death have priority to the extent of 95 per cent of the amount payable over claims arising out of damage to the insured automobile and its contents; and

(b) claims arising out of damage to the insured automobile and its contents have priority to the extent of 5 per cent over claims arising out of bodily injury or death.

4. Accidents Involving Unidentified Automobiles

Where an unidentified automobile has caused bodily injury or death to a person insured under the contract,

(a) the person insured under the contract, or someone on his behalf, shall report the accident within twenty-four hours, or as soon as practicable thereafter, to a police, peace or judicial officer or to an administrator of motor vehicle laws and shall file with the Insurer within thirty days, or as soon as practicable thereafter, a written statement that the person insured under the contract or his representative has a cause or causes of action arising out of such accident for damages against a person or persons whose identity cannot be ascertained and setting forth the facts in support thereof, and

(b) at the request of the Insurer, the person insured under the contract or his representative referred to in paragraph (a) shall make available for inspection the automobile of which the person insured under the contract was an occupant at the time of the accident.

5. Determination of Legal Liability and Amount of Damages

(1) The determination as to whether the person insured under the contract is legally entitled to recover damages and, if so entitled, the amount thereof shall be determined,

(a) by agreement between the person insured under the contract and the Insurer;

(b) at the request of the person insured under the contract, and with the consent of the Insurer, by arbitration by some person to be chosen by both parties, or if they cannot agree on one person, then by two persons, one to be chosen by the person insured under the contract and the other by the Insurer and a third person to be appointed by the persons so chosen; or

(c) by a court of competent jurisdiction in Ontario in an action brought against the Insurer by the person insured under the contract, and unless the determination has been previously made in a contested action by a court of competent jurisdiction in Ontario, the Insurer may include in its defence the determination of liability and the amount thereof.

(2) **The Arbitrations Act** applies to every arbitration under paragraph (b) of subclause (1) of this Clause.

6. Notice of Legal Action

(1) Where the person insured under the contract or his representative commences a legal action for damages against any other person owning or operating an automobile involved in the accident, a copy of the writ of summons or other proceeding shall be delivered or sent by registered mail immediately to the chief agency or head office of the Insurer in Ontario.

(2) Subject to Clause 3 of this Subsection 3, where the person insured under the contract or his representative obtains a judgment against the other person referred to in subclause (1) of this clause but is unable to recover, or to recover fully the amount of that judgment, the Insurer shall, on request, pay the amount of that judgment or, as the case may be, the difference between what he has recovered under that judgment and the amount of that judgment.

(3) Before making any payment under subclause (2) of this clause, the Insurer may require that the person insured under the contract or his representative assign his judgment, or the balance of his judgment, as the case may be, to the Insurer and the Insurer shall account to the person insured under the contract for any recovery it makes under that judgment for any amount in excess of what it has paid to that person and its costs.

7. Notice and Proof of Claim

(1) In respect of a claim for bodily injuries or death, the person insured under the contract or his representative, or the person otherwise entitled to make claim or his representative, shall,

(a) give written notice of claim to the Insurer by delivery thereof or by sending it by registered mail to the chief agency or head office of the Insurer in Ontario, within thirty days from the date of the accident or as soon as practicable thereafter;

(b) within ninety days from the date of the accident for which the claim is made, or as soon as practicable thereafter, furnish to the Insurer such proof of claim as is reasonably possible in the circumstances of the happening of the accident and the loss occasioned thereby;

(c) if so required by the Insurer, furnish a certificate as to the cause and nature of the accident for which the claim is made and as to the duration of the disability caused thereby from a medical practitioner legally qualified to practise;
and

(d) give details to the Insurer of any policies of insurance, other than policies of life insurance, to which such person may have recourse.

(2) In respect of a claim for damage to the insured automobile or its contents, or to both the insured automobile and its contents, the provisions of statutory condition 4 of subsection 2 of section 207 of **The Insurance Act** apply with necessary modifications to the insured automobile and to any contents with respect to which a claim is made.

8. Medical Reports

(1) The Insurer has the right and the claimant shall afford to the Insurer an opportunity to examine the person of the person insured under the contract when and as often as it reasonably requires while the claim is pending, and also, in the case of the death of the person insured under the contract, to make an autopsy subject to the law relating to autopsies.

(2) At the request of the claimant or his representative, the Insurer shall supply to the claimant or his representative, as the case may be, a copy of any medical or autopsy report obtained as a result of an examination or autopsy under subclause (1) of this clause.

9. When Moneys Payable

(1) No person shall bring an action to recover the amount of a claim provided for under the contract pursuant to subsection 1 of section 231 of **The Insurance Act** unless the requirements of this subsection 3 have been complied with.

(2) Every action or proceeding against the Insurer for the recovery of a claim shall be commenced within two years from the date on which the cause of action against the Insurer arose and not afterwards.

10. Limitation of Benefit Payable

Where a person is entitled to benefits under more than one contract providing insurance of the type set forth in subsection 1 of Section 231 of **The Insurance Act**, he or his representative or any person claiming through or under him or by virtue of **The Family Law Reform Act, 1978** may recover only an amount equal to one benefit.

11. Application of General Provisions

(1) In so far as applicable the general provisions, definitions, exclusions and statutory conditions of this policy also apply to payments under this subsection 3.

(2) Special Provisions, Definitions and Exclusions of Section B of this policy do not apply to the insurance provided by this subsection 3.

SPECIAL PROVISIONS, DEFINITIONS, AND EXCLUSIONS OF SECTION B

(1) "INSURED PERSON" DEFINED

In this section, the words "insured person" mean,

(a) any person while an occupant of the described automobile or of a newly acquired or temporary substitute automobile as defined in this policy.

(b) the insured and, if residing in the same dwelling premises as the insured, his or her spouse and any dependent relative of either while an occupant of any other automobile, provided that,

(i) the insured is an individual or are husband and wife.

(ii) such person is not engaged in the business of selling, repairing, maintaining, servicing, storing, or parking automobiles at the time of the accident.

(iii) such other automobile is not owned or regularly or frequently used by the insured or by any person or persons residing in the same dwelling premises as the insured.

(iv) such other automobile is not owned, hired, or leased by an employer of the insured or by an employer of any person or persons residing in the same dwelling premises as the insured;

(v) such other automobile is not used for carrying passengers for compensation or hire or for commercial delivery;

(c) in subsections 1 and 2 of this section only, any person, not the occupant of an automobile or of railway rolling-stock that runs on rails, who is struck, in Canada, by the described automobile or a newly acquired or temporary substitute automobile as defined in the policy;

(d) in subsections 1 and 2 of this section only, the named insured, if an individual and his or her spouse and any dependent relative residing in the same dwelling premises as the named insured, not the occupant of an automobile or of railway rolling-stock that runs on rails, who is struck by any other automobile; provided that,

(i) such person is not engaged in the business of selling, repairing, maintaining, servicing, storing, or parking automobiles at the time of the accident;

(ii) that automobile is not owned or regularly or frequently used by the insured or by any person or persons residing in the same dwelling premises as the named insured;

(iii) that automobile is not owned, hired, or leased by an employer of the insured or by an employer of any person or persons residing in the same dwelling premises as the named insured;

(e) if the insured is a corporation, unincorporated association, or partnership, any employee or partner of the insured for whose regular use the described automobile is furnished, and his or her spouse and any dependent relative of either, residing in the same dwelling premises as such employee or partner, while an occupant of any other automobile of the private passenger or station wagon type; and

(f) in subsections 1 and 2 of this section only, any employee or partner of the insured, for whose regular use the described automobile is furnished, and his or her spouse and any dependent relative of either, residing in the same dwelling premises as such employee or partner, while not the occupant of an automobile or of railway rolling-stock that runs on rails, who is struck by any other automobile; provided that,

in respect of (e) and (f) above,

(i) neither such employee nor partner or his or her spouse is the owner of an automobile of the private passenger or station wagon type;

(ii) the described automobile is of the private passenger or station wagon type;

(iii) such person is not engaged in the business of selling, repairing, maintaining, servicing, storing, or parking automobiles at the time of the accident;

(iv) such other automobile is not owned or regularly or frequently used by the employee or partner, or by any person or persons residing in the same dwelling premises as such employee or partner;

(v) such other automobile is not owned, hired, or leased by the insured or by an employer of any person or persons residing in the same dwelling premises as such employee or partner of the insured;

in respect of (e) above only,

(vi) such other automobile is not used for carrying passengers for compensation or hire or for commercial delivery.

(2) EXCLUSIONS

(a) Except as provided in Part III of Subsection 2, the Insurer shall not be liable under this section for bodily injury to or death of any person,

(i) resulting from the suicide of such person or attempt thereat, whether sane or insane; or

(ii) who is entitled to receive the benefits of any workmen's compensation law or plan; or

(iii) caused directly or indirectly by radioactive material;

(b) The insurer shall not be liable under subsection 1 or Part II of subsection 2 of this section for bodily injury or death,

(i) sustained by any person who is convicted of drunken or impaired driving or of driving while under the influence of drugs at the time of the accident; or

(ii) sustained by any person driving the automobile who is not for the time being either authorized by law or qualified to drive the automobile.

(3) NOTICE AND PROOF OF CLAIM

The insured person or his agent, or the person otherwise entitled to make claim or his agent, shall,

(a) give written notice of claim to the Insurer by delivery thereof or by sending it by registered mail to the chief agency or head office of the Insurer in the Province, within 30 days from the date of the accident or as soon as practicable thereafter;

(b) within 90 days from the date of the accident for which the claim is made, or as soon as practicable thereafter, furnish to the Insurer such proof of claim as is reasonably possible in the circumstances of the happening of the accident and the loss occasioned thereby;

(c) if so required by the Insurer, furnish a certificate as to the cause and nature of the accident for which the claim is made and as to the duration of the disability caused thereby from a medical practitioner legally qualified to practise.

(4) MEDICAL REPORTS

The Insurer has the right and the claimant shall afford to the Insurer, an opportunity to examine the person of the insured person when and as often as it reasonably requires while the claim is pending, and also, in the case of the death of the insured person, to make an autopsy subject to the law relating to autopsies.

(5) "PHYSICIAN" DEFINED

"Physician" means a legally qualified medical practitioner.

(6) RELEASE

Notwithstanding any release provided for under the relevant sections of The Insurance Act the Insurer may demand, as a condition precedent to payment of any amount under this section of the policy, a release in favour of the insured and the Insurer from liability to the extent of such payment from the insured person or his personal representative or any other person.

(7) WHEN MONEYS PAYABLE

(a) All amounts payable under this section, other than benefits under Part II of subsection 2, shall be paid by the Insurer within 30 days after it has received proof of claim. The initial benefits for loss of time under Part II of subsection 2 shall be paid within 30 days after it has received proof of claim, and payments shall be made thereafter within each 30-day period while the Insurer remains liable for payments if the insured person, whenever required to do so, furnishes prior to payment proof of continuing disability.

(b) No person shall bring an action to recover the amount of a claim under this section unless the requirements of provisions 3 and 4 are complied with, nor until the amount of the loss has been ascertained as provided in this section.

(c) Every action or proceeding against the Insurer for the recovery of a claim under this section shall be commenced within one year from the date on which the cause of action arose and not afterwards.

(8) LIMITATION ON BENEFIT PAYABLE

Where a person is entitled to benefits under more than one contract providing insurance of the type set forth in subsection 1 or 2, he or his personal representative or any person claiming through or under him or by virtue of The Fatal Accidents Act, may recover only an amount equal to one benefit.

In so far as applicable the general provisions, definitions, exclusions and statutory conditions of the policy also apply.

SECTION C — LOSS OF OR DAMAGE TO INSURED AUTOMOBILE

The Insurer agrees to indemnify the insured against direct and accidental loss of or damage to the automobile, including its equipment

Subsection 1 — ALL PERILS — from all perils;

Subsection 2 — COLLISION OR UPSET — caused by collision with another object or by upset;

Subsection 3 — COMPREHENSIVE — from any peril other than by collision with another object or by upset;

The words "another object" as used in this subsection 3 shall be deemed to include (a) a vehicle to which the automobile is attached and (b) the surface of the ground and any object therein or thereon.

Loss or damage caused by missiles, falling or flying objects, fire, theft, explosion, earthquake, windstorm, hail, rising water, malicious mischief, riot or civil commotion shall be deemed loss or damage caused by perils for which insurance is provided under this subsection 3.

Subsection 4 — SPECIFIED PERILS — caused by fire, lightning, theft or attempt thereat, windstorm, earthquake, hail, explosion, riot or civil commotion, falling or forced landing of aircraft or of parts thereof, rising water, or the stranding, sinking, burning, derailment or collision of any conveyance in or upon which the automobile is being transported on land or water;

DEDUCTIBLE CLAUSE

Each occurrence causing loss or damage covered under any subsection of section C except loss or damage caused by fire or lightning or theft of the entire automobile covered by such subsection, shall give rise to a separate claim in respect of which the Insurer's liability shall be limited to the amount of loss or damage in excess of the amount deductible, if any, stated in the applicable subsection of section C of item 4 of the application.

EXCLUSIONS

The Insurer shall not be liable,

(1) under any subsection of section C for loss or damage

(a) to tires or consisting of or caused by mechanical fracture or breakdown of any part of the automobile or by rusting, corrosion, wear and tear, freezing, or explosion within the combustion chamber, unless the loss or damage is coincident with other loss or damage covered by such subsection or is caused by fire, theft or malicious mischief covered by such subsection; or

(b) caused by the conversion, embezzlement, theft or secretion by any person in lawful possession of the automobile under a mortgage, conditional sale, lease or other similar written agreement; or

(c) caused by the voluntary parting with title or ownership, whether or not induced to do so by any fraudulent scheme, trick, device or false pretense; or

(d) caused directly or indirectly by contamination by radioactive material; or

(e) to contents of trailers or to rugs or robes; or

(f) to tapes and equipment for use with a tape player or recorder when such tapes or equipment are detached therefrom; or

(g) where the insured drives or operates the automobile
  (i) while under the influence of intoxicating liquor or drugs to such an extent as to be for the time being incapable of the proper control of the automobile; or
  (ii) while in a condition for which he is convicted of an offence under section 234 or section 236 of the Criminal Code (Canada) or under or in connection with circumstances for which he is convicted of an offence under section 235(2) of the Criminal Code (Canada); or

(h) where the insured permits, suffers, allows or connives at the use of the automobile by any person contrary to the provisions of (g);

(2) under subsections 3 (Comprehensive), 4 (Specified Perils) only, for loss or damage caused by theft by any person or persons residing in the same dwelling premises as the insured, or by any employee of the insured engaged in the operation, maintenance or repair of the automobile whether the theft occurs during the hours of such service or employment or not.

See also General Provisions, Definitions, Exclusions and Statutory Conditions of this policy

ADDITIONAL AGREEMENTS OF INSURER

(1) Where loss or damage arises from a peril for which a premium is specified under a subsection of this section, the Insurer further agrees:

(a) to pay general average, salvage and fire department charges and customs duties of Canada or of the United States of America for which the Insured is legally liable;

(b) to waive subrogation against every person who, with the insured's consent, has care, custody or control of the automobile, provided always that this waiver shall not apply to any person (1) having such care, custody or control in the course of the business of selling, repairing, maintaining, servicing, storing or parking automobiles, or (2) who has (i) committed a breach of any condition of this policy or (ii) driven or operated the automobile in the circumstances referred to in (i) or (ii) of paragraph (g) of the Exclusions to Section C of this policy;

(c) to indemnify the insured and any other person who personally drives a temporary substitute automobile as defined in the General Provisions of this policy against the liability imposed by law or assumed by the insured or such other person under any contract or agreement for direct and accidental physical loss or damage to such automobile and arising from the care, custody and control thereof, provided always that
  (i) such indemnity is subject to the deductible clause and exclusions of each such subsection;
  (ii) if the owner of such automobile has or places insurance against any peril insured by this section, the indemnity provided herein shall be limited to the sum by which the deductible amount, if any, of such other insurance exceeds the deductible amount stated in the applicable subsection of this policy;
  (iii) the Additional Agreements under section A of this policy shall, insofar as they are applicable, extend to the indemnity provided herein.

(2) **Loss of Use by Theft** — Where indemnity is provided under subsections 1, 3 or 4 of section C hereof the Insurer further agrees, following a theft of the entire automobile covered thereby, to reimburse the insured for expense not exceeding $25.00 for any one day nor totalling more than $750.00 incurred for the rental of a substitute automobile including taxicabs and public means of transportation.

Reimbursement is limited to such expense incurred during the period commencing seventy-two hours after such theft has been reported to the Insurer or the police and terminating, regardless of the expiration of the policy period, (a) upon the date of the completion of repairs to or the replacement of the property lost or damaged, or (b) upon such earlier date as the Insurer makes or tenders settlement for the loss or damage caused by such theft.

GENERAL PROVISIONS, DEFINITIONS AND EXCLUSIONS

1. **TERRITORY**
This policy applies only while the automobile is being operated, used, stored or parked within Canada, the United States of America or upon a vessel plying between ports of those countries.

2. **OCCUPANT DEFINED**
In this policy the word "occupant" means a person driving, being carried in or upon or entering or getting on to or alighting from an automobile.

3. **CONSENT OF OWNER**
No person shall be entitled to indemnity or payment under this policy who is an occupant of any automobile which is being used without the consent of the owner thereof.

4. **GARAGE PERSONNEL EXCLUDED**
No person who is engaged in the business of selling, repairing, maintaining, storing, servicing or parking automobiles shall be entitled to indemnity or payment under this policy for any loss, damage, injury or death sustained while engaged in the use or operation of or while working upon the automobile in the course of that business or while so engaged is an occupant of the described automobile or a newly acquired automobile as defined in this policy, unless the person is the owner of such automobile or his employee or partner.

5. **AUTOMOBILE DEFINED**
In this policy except where stated to the contrary the words "the automobile" mean:

Under sections A (Third Party Liability), B (Accident Benefits), C (Loss of or Damage to Insured Automobile)

(a) The Described Automobile — an automobile, trailer or semi-trailer specifically described in the policy or within the description of insured automobiles set forth therein;

(b) A Newly Acquired Automobile — an automobile, ownership of which is acquired by the insured and, within fourteen days following the date of its delivery to him, notified to the Insurer in respect of which the insured has no other valid insurance, if either it replaces an automobile described in the application or the Insurer insures (in respect of the section or subsection of the Insuring Agreements under which claim is made) all automobiles owned by the insured at such delivery date and in respect of which the insured pays any additional premium required; provided however, that insurance hereunder shall not apply if the insured is engaged in the business of selling automobiles;

and under sections A (Third Party Liability), B (Accident Benefits) only

(c) A Temporary Substitute Automobile — an automobile not owned by the insured, nor by any person or persons residing in the same dwelling premises as the insured, while temporarily used as the substitute for the described automobile which is not in use by any person insured by this policy, because of its breakdown, repair, servicing, loss, destruction or sale;

(d) Any automobile of the private passenger or station wagon type, other than the described automobile, while personally driven by the insured, or by his or her spouse if residing in the same dwelling premises as the insured, provided that
  (i) the described automobile is of the private passenger or station wagon type;
  (ii) the insured is an individual or are husband and wife;
  (iii) neither the insured nor his or her spouse is driving such automobile in connection with the business of selling, repairing, maintaining, servicing, storing or parking automobiles;
  (iv) such other automobile is not owned or regularly or frequently used by the insured or by any person or persons residing in the same dwelling premises as the insured;
  (v) such other automobile is not owned, hired or leased by an employer of the insured or by an employer of any person or persons residing in the same dwelling premises as the insured;
  (vi) such other automobile is not used for carrying passengers for compensation or hire or for commercial delivery;

(e) If the insured is a corporation, unincorporated association or registered co-partnership, any automobile of the private passenger or station wagon type, other than the described automobile, while personally driven by the employee or partner for whose regular use the described automobile is furnished, or by his or her spouse if residing in the same dwelling premises as such employee or partner, provided that

(i) neither such employee or partner or his or her spouse is the owner of an automobile of the private passenger or station wagon type;

(ii) the described automobile is of the private passenger or station wagon type;

(iii) neither such employee, partner or spouse is driving the automobile in connection with the business of selling, repairing, maintaining, servicing, storing or parking automobiles;

(iv) such other automobile is not owned, hired or leased or regularly or frequently used by the insured or such employee or by any partner of the insured or by any persons residing in the same dwelling premises as any of the aforementioned persons;

(v) such other automobile is not used for carrying passengers for compensation or hire or commercial delivery;

(f) Trailers — any trailer used in connection with the automobile.

6. TWO OR MORE AUTOMOBILES

(a) When two or more automobiles are described hereunder (i) with respect to the use or operation of such described automobiles, each automobile shall be deemed to be insured under a separate policy; (ii) with respect to the use or operation of an automobile not owned by the insured, the limit of the insurer's liability shall not exceed the highest limit applicable to any one described automobile;

(b) When the insured owns two or more automobiles which are insured as described automobiles under two or more automobile insurance policies, the limit of the insurer under this policy with respect to the use or operation of an automobile not owned by the insured shall not exceed the proportion that the highest limit applicable to any one automobile described in this policy bears to the sum of the highest limits applicable under each policy and in no event shall exceed such proportion of the highest limit applicable to any one automobile under any policy;

(c) A motor vehicle and one or more trailers or semi-trailers attached thereto shall be held to be one automobile with respect to the limit(s) of liability under Insuring Agreements A and B and separate automobiles with respect to the limit(s) of liability, including any deductible provisions, under Insuring Agreement C.

7. WAR RISKS EXCLUDED

The Insurer shall not be liable under section B or C of this policy for any loss, damage, injury or death caused directly or indirectly by bombardment, invasion, civil war, insurrection, rebellion, revolution, military or usurped power, or by operation of armed forces while engaged in hostilities, whether war be declared or not.

8. EXCLUDED USES

Unless coverage is expressly given by an endorsement of this policy the Insurer shall not be liable under this policy while:

(a) the automobile is rented or leased to another; provided that the use by an employee of his automobile on the business of his employer and for which he is paid shall not be deemed the renting or leasing of the automobile to another;

(b) the automobile is used to carry explosives, or to carry radioactive material for research, education, development or industrial purposes, or for purposes incidental thereto;

(c) the automobile is used as a taxicab, public omnibus, livery, jitney or sightseeing conveyance or for carrying passengers for compensation or hire; provided that the following uses shall not be deemed to be the carrying of passengers for compensation or hire:

(i) the use by the insured of his automobile for the carriage of another person in return for the former's carriage in the automobile of the latter;

(ii) the occasional and infrequent use by the insured of his automobile for the carriage of another person who shares the cost of the trip;

(iii) the use by the insured of his automobile for the carriage of a temporary or permanent domestic servant of the insured or his spouse;

(iv) the use by the insured of his automobile for the carriage of clients or customers or prospective clients or customers;

(v) the occasional and infrequent use by the insured of his automobile for the transportation of children to or from school or school activities conducted within the educational program.

STATUTORY CONDITIONS

In these Statutory Conditions, unless the context otherwise requires, the word "insured" means a person insured by this contract whether named or not. *With respect to Section B only Statutory Conditions 1, 8 and 9 shall apply.*

Material Change in Risk

1. (1) The insured named in this contract shall promptly notify the Insurer or its local agent in writing of any change in the risk material to the contract and within his knowledge.

(2) Without restricting the generality of the foregoing, the words "change in the risk material to the contract" include:

(a) any change in the insurable interest of the insured named in this contract in the automobile by sale, assignment or otherwise, except through change of title by succession, death or proceedings under the *Bankruptcy Act* (Canada);

and in respect of insurance against loss of or damage to the automobile,

(b) any mortgage, lien or encumbrance affecting the automobile after the application for this contract;

(c) any other insurance of the same interest, whether valid or not, covering loss or damage insured by this contract or any portion thereof.

Prohibited Use by Insured

2. (1) The insured shall not drive or operate the automobile,

(a) unless he is for the time being either authorized by law or qualified to drive or operate the automobile; or

(b) while his licence to drive or operate an automobile is suspended or while his right to obtain a licence is suspended or while he is prohibited under order of any court from driving or operating an automobile; or

(c) while he is under the age of sixteen years or under such other age as is prescribed by the law of the province in which he resides at the time this contract is made as being the minimum age at which a licence or permit to drive an automobile may be issued to him; or

(d) for any illicit or prohibited trade or transportation; or

(e) in any race or speed test.

Prohibited Use by Others

(2) The insured shall not permit, suffer, allow or connive at the use of the automobile,

(a) by any person,

(i) unless that person is for the time being either authorized by law or qualified to drive or operate the automobile, or

(ii) while that person is under the age of sixteen years or under such other age as is prescribed by the law of the province in which he resides at the time this contract is made as being the minimum age at which a licence or permit to drive an automobile may be issued to him; or

(b) by any person who is a member of the household of the insured while his licence to drive or operate an automobile is suspended or while his right to obtain a licence is suspended or while he is prohibited under order of any court from driving or operating an automobile, or

(c) for any illicit or prohibited trade or transportation; or

(d) in any race or speed test.

Requirements Where Loss or Damage to Persons or Property

3. (1) The insured shall,

(a) promptly give to the Insurer written notice, with all available particulars, of any accident involving loss or damage to persons or property and of any claim made on account of the accident;

(b) verify by statutory declaration, if required by the Insurer, that the claim arose out of the use or operation of the automobile and that the person operating or responsible for the operation of the automobile at the time of the accident is a person insured under this contract; and

(c) forward immediately to the Insurer every letter, document, advice or writ received by him from or on behalf of the claimant.

(2) The insured shall not,

(a) voluntarily assume any liability or settle any claim except at his own cost; or

(b) interfere in any negotiations for settlement or in any legal proceeding.

(3) The insured shall, whenever requested by the Insurer, aid in securing information and evidence and the attendance of any witness and shall co-operate with the Insurer, except in a pecuniary way, in the defence of any action or proceeding or in the prosecution of any appeal.

Requirements Where Loss or Damage to Automobile

4. (1) Where loss of or damage to the automobile occurs, the insured shall, if the loss or damage is covered by this contract,

(a) promptly give notice thereof in writing to the Insurer with the fullest information obtainable at the time;

(b) at the expense of the Insurer, and as far as reasonably possible, protect the automobile from further loss or damage; and

(c) deliver to the Insurer within ninety days after the date of the loss or damage a statutory declaration stating, to the best of his knowledge and belief, the place, time, cause and amount of the loss or damage, the interest of the insured and of all others therein, the encumbrances thereon, all other insurance, whether valid or not, covering the automobile and that the loss or damage did not occur through any wilful act or neglect, procurement, means or connivance of the insured.

(2) Any further loss or damage accruing to the automobile directly or indirectly from a failure to protect it as required under subcondition 1 of this condition is not recoverable under this contract.

(3) No repairs, other than those that are immediately necessary for the protection of the automobile from further loss or damage, shall be undertaken and no physical evidence of the loss or damage shall be removed,

(a) without the written consent of the Insurer; or

(b) until the Insurer has had a reasonable time to make the examination for which provision is made in statutory condition 5.

Examination of Insured

(4) The insured shall submit to examination under oath, and shall produce for examination at such reasonable place and time as is designated by the Insurer or its representative all documents in his possession or control that relate to the matters in question, and he shall permit extracts and copies thereof to be made.

Insurer Liable for Cash Value of Automobile

(5) The Insurer shall not be liable for more than the actual cash value of the automobile at the time any loss or damage occurs, and the loss or damage shall be ascertained or estimated according to that actual cash value with proper deduction for depreciation, however caused, and shall not exceed the amount that it would cost to repair or replace the automobile, or any part thereof, with material of like kind and quality, but, if any part of the automobile is obsolete and out of stock, the liability of the Insurer in respect thereof shall be limited to the value of that part at the time of loss or damage, not exceeding the maker's latest list price.

Repair or Replacement

(6) Except where an appraisal has been made, the Insurer, instead of making payment, may, within a reasonable time, repair, rebuild or replace the property damaged or lost with other of like kind and quality if, within seven days after the receipt of the proof of loss, it gives written notice of its intention to do so.

No Abandonment; Salvage

(7) There shall be no abandonment of the automobile to the Insurer without the Insurer's consent. If the Insurer exercises the option to replace the automobile or pays the actual cash value of the automobile, the salvage, if any, shall vest in the Insurer.

In Case of Disagreement

(8) In the event of disagreement as to the nature and extent of the repairs and replacements required, or as to their adequacy, if effected, or as to the amount payable in respect of any loss or damage, those questions shall be determined by appraisal as provided under *The Insurance Act* before there can be recovery under this contract, whether the right to recover on the contract is disputed or not, and independently of all other questions. There shall be no right to an appraisal until a specific demand therefor is made in writing and until after proof of loss has been delivered.

Inspection of Automobile

5. The insured shall permit the Insurer at all reasonable times to inspect the automobile and its equipment.

Time and Manner of Payment of Insurance Money

6. (1) The Insurer shall pay the insurance money for which it is liable under this contract within sixty days after the proof of loss has been received by it or, where an appraisal is made under subcondition 8 of statutory condition 4, within fifteen days after the award is rendered by the appraisers.

When Action May be Brought

(2) The insured shall not bring an action to recover the amount of a claim under this contract unless the requirements of statutory conditions 3 and 4 are complied with or until the amount of the loss has been ascertained as therein provided or by a judgment against the insured after trial of the issue or by agreement between the parties with the written consent of the Insurer.

Limitation of Actions

(3) Every action or proceeding against the Insurer under this contract in respect of loss or damage to the automobile shall be commenced within one year next after the happening of the loss and not afterwards, and in respect of loss or damage to persons or property shall be commenced within one year next after the cause of action arose and not afterwards.

Who May Give Notice and Proofs of Claim

7. Notice of claim may be given and proofs of claim may be made by the agent of the insured named in this contract in case of absence or inability of the insured to give the notice or make the proof, such absence or inability being satisfactorily accounted for or, in the like case or if the insured refuses to do so, by a person to whom any part of the insurance money is payable.

Termination

8. (1) This contract may be terminated,

(a) by the Insurer giving to the insured fifteen days' notice of termination by registered mail or five days' written notice of termination personally delivered;

(b) by the insured at any time on request.

(2) Where this contract is terminated by the Insurer,

(a) the Insurer shall refund the excess of premium actually paid by the insured over the *pro rata* premium for the expired time, but in no event shall the *pro rata* premium for the expired time be deemed to be less than any minimum retained premium specified; and

(b) the refund shall accompany the notice unless the premium is subject to adjustment or determination as to the amount, in which case the refund shall be made as soon as practicable.

(3) Where this contract is terminated by the insured, the Insurer shall refund as soon as practicable the excess of premium actually paid by the insured over the short rate premium for the expired time, but in no event shall the short rate premium for the expired time be deemed to be less than any minimum retained premium specified.

(4) The refund may be made by money, postal or express company money order or cheque payable at par.

(5) The fifteen days mentioned in clause a of subcondition 1 of this condition commences to run on the day following the receipt of the registered letter at the post office to which it is addressed.

Notice

9. Any written notice to the Insurer may be delivered at, or sent by registered mail to, the chief agency or head office of the Insurer in the Province. Written notice may be given to the insured named in this contract by letter personally delivered to him or by registered mail addressed to him at his latest post office address as notified to the Insurer. In this condition, the expression "registered" means registered in or outside Canada.

APPENDIX XI

AGREEMENT made this day of , A.D. 1978

B E T W E E N:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF ONTARIO, represented herein by the Minister of Health for the Province of Ontario,

(hereinafter called "the Minister")

OF THE FIRST PART

- and -

(hereinafter called "the Insurer)

OF THE SECOND PART

WHEREAS section 35 of The Health Insurance Act, 1972 (hereinafter referred to as "the Act") provides that where, as a result of the negligence or other wrongful act or omission of another, an insured person suffers personal injuries for which he receives insured services under the Act, the Plan is subrogated to any right of the insured person to recover the cost incurred for past insured services and the cost that will probably be incurred for future insured services;

AND WHEREAS section 40 of the Act provides that a liability insurer may pay to the Treasurer of Ontario any amount referable to a claim for recovery of the cost of insured services and such payment discharges the obligation of the liability insurer to pay that amount to the insured person;

AND WHEREAS the Minister and the Insurer have estimated that the total amount paid by the Insurer to the Ontario Health Insurance Plan (hereinafter referred to as "the Plan") in each calendar year heretofore, in respect of claims made pursuant to the Plan's subrogated rights against persons insured by the Insurer under automobile liability policies, is approximately two (2) per cent of the gross automobile third party liability premiums payable to the Insurer in such calendar year in respect of business transacted in Ontario;

ACCORDINGLY the Minister and the Insurer have agreed that, for the purpose of simplifying their administrative procedures and of reducing their administrative costs, the collective subrogated claims of the Plan in respect of causes of action arising after the 30th day of November, 1978, will be settled in advance by payment by the Insurer on the basis hereinafter set out;

DEFINITIONS

2.1 "annual settlement amount" means the total amount payable by the Insurer in each calendar year, pursuant to section 3.1.

2.2 "applicable percentage" means,

(a) for a calendar year for which the bodily injury factor does not exceed .95 or exceeds 1.05, the percentage set out opposite the bodily injury factor in Table 1; and

(b) for any other calendar year, 2 per cent, subject to section 3.5.

2.3 "bodily injury factor", for a specific calendar year, means the ratio of the mean bodily injury ratio applicable to such year to the mean bodily injury ratio applicable to the calendar year 1979.

2.4 "bodily injury ratio" for a fiscal policy year statistical period means the result obtained by dividing the Loss Cost per Car Insured for the said period, as set out under the heading "Bodily Injury Liability Loss Statistics" in the Green Book Exhibits, by the corresponding Loss Cost per Car Insured set out under the heading "Bodily Injury and Property Damage Liability Combined" for the same period in the same Green Book Exhibits.

2.5 "cause of action" means the cuase of action of a person who is an insured person under the Act.

2.6 "Green Book Exhibits" means the "Trend or Loss Cost Exhibits, Third Party Liability - Private Passenger Automobiles - Excluding Farmers" shown for Ontario in the publication of Automobile Insurance Experience compiled under the Superintendent of Insurance's Statistical Plan.

2.7 "gross premiums" means the gross third party liability premiums under policies of automobile insurance that become payable to the Insurer or any of its agents during a calendar year in respect of business transacted in Ontario, other than premiums in respect of re-insurance ceded to the Insurer by other insurers after deducting from such premiums,

(a) cash value of dividends to policyholders;

(b) premiums returned.

2.8 "mean bodily injury ratio", as applicable to a specific calendar year, means one-third of the sum of the bodily injury ratios for the fiscal policy year statistical periods ending on the 30th day of June in the 1st, 2nd and 3rd years next preceding the said calendar year, as derived from the Green Book Exhibits compiled as of December 31st of the calendar year next preceding the said calendar year.

2.9 "reported gross premiums" means the gross premiums reported by the Insurer to the Superintendent of Insurance for Ontario pursuant to section 79 of The Insurance Act or any amendments thereto.

2.10 All references in this Agreement to data derived from the Green Book Exhibits will be construed to refer only to data in respect of the Province of Ontario.

SETTLEMENT PAYMENTS

3.1 (1) For each calendar year, the Insurer will pay to the Plan an amount equal to the applicable percentage of the Insurer's gross premiums for that year.

(2) Notwithstanding subsection (1), for the calendar year 1979 the Insurer will pay to the Plan an amount equal to five-sixths of the applicable percentage of the Insurer's gross premiums for that year.

3.2 In determining the amount payable under section 3.1 every premium that by the terms of the policy or renewal thereof becomes payable in respect of insurance of a person resident or property situate in Ontario at the time such premium becomes payable whether or not,

(a) such premium is earned wholly or partly in Ontario,

(b) the business in respect of the policy is transacted wholly or partly in Ontario, or

(c) the payment of such premiums is made wholly or partly in Ontario,

shall be deemed to be a premium payable in respect of business transacted in Ontario.

3.3 The Insurer will make the payments referred to in section 3.1 in the following manner:

(1) On or before the last day of each calendar month commencing with the last day of March, 1979, the Insurer will pay an instalment equal to one-twelfth of the product of 2 per cent and

(a) in the case of a payment due on the last day of January or February, the Insurer's reported gross premiums for the second calendar year next preceding the calendar year in which the payment is required to be made; and

(b) in the case of a payment due on the last day of any other month, the Insurer's reported gross Premiums for the calendar year next preceding the calendar year in which the payment is required to be made.

(2) Where the aggregate of the amounts paid by the Insurer pursuant to subsection (1) for a calendar year is less or greater than the product of the Insurer's reported gross premiums for such calendar year and the correct applicable percentage for such calendar year, the Insurer will pay the deficiency or the Minister will refund refund the excess of payment, as the case may be, on or before the 31st day of March in the year next following such calendar year (hereinafter called "the date of adjustment").

(3) Where, subsequent to the date of adjustment, it is ascertained that the Insurer's actual gross premiums were less or greater than the reported gross premiums, the Insurer will forthwith pay the resulting balance owing or the Minister will forthwith refund the resulting excess of amounts

paid, as the case may be.

INTEREST

3.4 (1) Where all or any part of an amount required to be paid by subsection (1) of section 3.3 is not paid on or before the date prescribed therein, the Insurer will pay interest on the unpaid amount from the prescribed date to the date of payment or to the date of adjustment, whichever is earlier, at the rate provided for in subsection 2 of section 149 of The Corporations Tax Act, 1972, or any amendments thereto.

(2) Any amounts payable by the Insurer or by the Minister under this Agreement (including any amounts payable by way of interest) which have not been paid on or before the date of adjustment will be paid with interest from the date of adjustment to the date of payment, at the rate provided for

(a) in the case of payment by the Insurer, in subsection 1 of section 149 of The Corporations Tax Act, 1972, or any amendments thereto; and

(b) in the case of payment by the Minister, in subsection 3 of section 152 of The Corporations Tax Act, 1972, or any amendments thereto.

3.5 The applicable percentage for any calendar year in which

(a) the tax rate prescribed in clause (b) of subsection 1 of section 143 of The Corporations Tax Act, 1972, or any amendments thereto is greater or less than 3 per cent; or

(b) the Insurer is, by virtue of subsection 4 of the said section 143, not required to pay the premium tax, will be the product of the applicable percentage indicated in section 2.2 and the fraction $\frac{100-T}{97}$, T being the aggregate of the products of each different tax rate in effect at any time during such year and the proportion of the part of the calendar year during which such rate was in effect to the whole year.

3.6 For the purposes of section 3.5, the tax rate in effect during any period when the said section 143 provided that the Insurer was not required to pay the premium tax will be deemed to be 0 per cent.

PAYMENT DISCHARGES OBLIGATION

4.1 Payment by the Insurer of the annual settlement amount under section 3.1 discharges the Insurer's obligations in respect of causes of action arising up to the last day of the ninth month of the calendar year to which the annual settlement amount is related, (for example, payment of the annual settlement amount for the calendar year 1980 discharges the Insurer's obligations in respect of causes of action arising to the 30th day of September, 1980).

4.2 Notwithstanding section 4.1, nothing in this Agreement affects the Plan's rights in respect of any cause of action arising before the 1st day of December, 1978.

4.3 Nothing in this Agreement affects any cause of action other than a cause of action arising

a) after the 30th day of November, 1978, and

b) out of the ownership, use or operation of an automobile which was, on the date the cause of action arose, the subject of a permit issued under subsection 3 of section 6 of The Highway Traffic Act or any amendment thereto,

and then only to the extent that the loss or damage giving rise to the cause of action is insured against by the Insurer.

AUDIT

5.1 The Superintendent of Insurance, the Deputy Superintendent of Insurance, a duly qualified member of his staff, or other auditor designated by the Minister may inspect, examine and audit the books, accounts, reports, records and other documents, wherever situate, of the Insurer for the purpose of ascertaining, establishing or verifying the amount of the Insurer's gross premiums.

5.2 The Superintendent of Insurance, the Deputy Superintendent of Insurance, a duly qualified member of his staff, or other auditor designated by the Minister may cause abstracts to be prepared of the books, accounts, reports, records or other documents examined under section 5.1 relating to the Insurer and to the subject matter of the inspection, examination or audit.

TERMINATION

6.1 This Agreement shall remain in full force and effect until the 31st day of December, 1980, and thereafter until terminated in accordance with sections 6.2 or 6.3 but not otherwise.

6.2 The Insurer may terminate this Agreement as of the 31st day of December in any year after 1979 by giving at least one year's notice in writing to that effect to the Minister.

6.3 The Minister may terminate this Agreement as of the 31st day of December in any year after 1979 by giving at least one year's notice in writing to that effect to the Insurer.

6.4 In the event of any termination, then subject to section 4.1 the Plan may exercise its subrogated right as though this Agreement had not been entered into.

6.5 Any rights and obligations of the Minister and the Insurer not enforced or discharged as of the date of any termination may be enforced and shall be discharged as though there had been no termination, and in particular and without restricting the generality of the foregoing, sections 5.1 and 5.2 continue to apply.

NOTICES

7.1 Every notice provided for or permitted by this Agreement shall be in writing and delivered to or sent by registered mail to the party to whom it is to be given at:

(a) in the case of a notice to the Minister:

Subrogation Division
Ontario Health Insurance Plan
3rd Floor
7 Overlea Blvd.
Toronto, Ontario
M4H 1A9

(b) in the case of a notice to the Insurer:

The principal office or place of
business of the Insurer in Ontario;

or such other address as the party to be notified may from time to time advise the other party in writing.

7.2 Notice sent by registered mail shall be deemed to have been received on the seventh day after the day of mailing, unless received sooner.

AMENDMENTS

8.1 This Agreement may not be altered, amended or otherwise varied except by a subsequent written agreement of equal formality executed by the parties hereto.

ENTIRETY

9.1 It is agreed that this Agreement embodies the entire agreement of the parties hereto with regard to the matters dealt with herein; and that no understanding or agreements, verbal or otherwise, exist between the parties except as herein expressly set out.

SUCCESSORS AND ASSIGNS

10.1 This Agreement shall enure to the benefit of and be binding upon the respective successors and assigns of the parties hereto.

VALIDITY AND INTERPRETATION

11.1 Should any provision or provisions of this Agreement be illegal or unenforceable, it or they shall be considered separate and severable from the Agreement and its remaining provisions shall remain in force and be binding upon the parties hereto as though the said provision or provisions had never been included.

11.2 The validity and interpretation of this Agreement, and of each clause and part thereof, shall be governed by the law of the Province of Ontario.

TABLE 1

BODILY INJURY FACTOR	PERCENTAGE
Over 1.25	Such percentage as the parties hereto shall hereinafter agree to
Over 1.15 but not in excess of 1.25	2.4
Over 1.05 but not in excess of 1.15	2.2
Over .85 but not in excess of .95	1.8
Over .75 but not in excess of .85	1.6
.75 or under	Such percentage as the parties hereto shall hereinafter agree to

IN WITNESS WHEREOF the Minister has hereunto set his hand and seal, and the Insurer has hereto affixed its corporate seal attested by the hands of its duly authorized officers, this day of , 1978.

SIGNED, SEALED AND DELIVERED in the presence of	HER MAJESTY THE QUEEN in Right of the Province of Ontario, as represented by
______________________________ (as to the signature of the Minister)	______________________________ Minister of Health for the Province of Ontario
	______________________________
	______________________________

DATED: 1978

HER MAJESTY THE QUEEN in
Right of the Province of
Ontario

- and -

AGREEMENT

APPENDIX XII

August 25, 1983

CLASSIFICATION BY AGE, SEX AND MARITAL STATUS FOR AUTOMOBILE INSURANCE RATES

An opinion prepared for the Insurance Bureau of Canada

Peter W. Hogg, Q.C.,
Professor of Law,
Osgoode Hall Law School,
York University,
Toronto.

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August 25, 1983

CLASSIFICATION BY AGE, SEX AND MARITAL STATUS FOR AUTOMOBILE INSURANCE RATES

The opinion requested

I am asked for my opinion on the question whether the Canadian Charter of Rights and Freedoms prohibits the use by insurance companies of age, sex and marital status as factors in fixing the rates for automobile insurance. I am asked to assume that s.15 of the Charter (the equality clause) is in force, so that the opinion looks ahead to the position on April 17, 1985, when s.15 comes into force. It will be recalled that the Charter came into force on April 17, 1982, but that the operation of s.15 was postponed for three years to provide time for the various governments to make whatever changes were necessary to bring their laws into compliance with s.15. In other words, the question for my opinion is: do automobile insurers have to abandon age, sex and marital status as rating criteria by April 17, 1985?

My conclusions are summarized at the end of this opinion, but for convenience I reproduce them here as well. In my opinion, after April 17, 1985:

1. The use of age as a rating factor for automobile insurance will not contravene the Charter.

2. The use of marital status will probably not contravene the Charter.

3. The use of sex will contravene the Charter.

4. In provinces where rates are set by private insurance companies, and are not subject to any form of government approval, the Charter does not apply to those rates at all: even sex can be used as a rating factor for those rates in those provinces.

The facts

I understand that the use by the automobile insurance industry in Ontario and most other jurisdictions of age, sex and marital status as rating factors is based on the claims experience of the industry. That experience shows that persons under 25 have on average more accidents than persons over 25, that males under 25 have more accidents than females under 25, and that single males under 25 have more accidents than married males under 25.

The theory underlying automobile insurance (like other kinds of insurance) is that each insured should pay a premium which reflects an assessment of the amount of risk which that insured imposes on the system. In making that assessment, the industry tries to identify groups (or cells) of insureds who present similar risks to the system. The objective is to fix the premium for each member of a group at a rate which, when pooled with all the premiums of the other members of the group, will fully pay the cost of insuring that group. The cost consists of the claims, the administrative expenses and a profit. The idea is that no one group should subsidize any other group.

The process of classification which yields the various groups of policyholders is hampered by incomplete information about all the drivers of insured vehicles. It is possible that more abundant information would lead to quite different classifications, but some kinds of information which might indicate accident-proneness are controversial or entail invasions of privacy or would be costly to collect. Accordingly, the industry classifies on the basis of a number of objective factors which can be readily ascertained and which its previous claims experience shows have predictive value. As noted earlier, three of those factors are age, sex and marital status.

I understand that the industry could abandon the factors of age, sex and marital status, and rely instead upon other more personal factors, such as driving experience, miles driven, pattern of use, convictions, and previous claims. But many of these factors are already employed in addition to age, sex and marital status. Since age, sex and marital status do have independent predictive value, the abandonment of those factors would lead to subsidization of the insurance costs of drivers now assessed most heavily. In other words, the premiums for young single males, which would fall substantially, would no longer cover the cost of supplying their insurance, which would generate losses for the carrier; and the premiums for older persons, which would have to rise, would generate excessive profits for the carrier. This kind of cross-subsidization is resisted by the industry as contrary to sound insurance principles and as giving rise to a variety of fairly serious problems. The effects of eliminating age, sex and marital status are analyzed in Rea and Trebilcock, "Rate Determination in the Automobile Industry in Ontario: the use of Age, Sex and Marital Status as Rating Variables" (a study commissioned by the Insurance Bureau of Canada, 1982).

This opinion proceeds from the premise that age, sex and marital status are factors which have been selected by the insurance industry as rating variables, not by reason of any prejudice against youth or the male sex or the unmarried state but in accordance with insurance principles which are widely accepted within the industry. The question is: do those principles have to be modified to conform to the values now contained in the Charter of Rights?

Governmental participation in rate-fixing

The Charter does not apply to the activities of private individuals, corporations or organizations. By virtue of s.32(1), the Charter applies only to "the Parliament and government of Canada" and to "the legislature and government of each province". The Charter operates as a limitation on the activities of legislative bodies, government officials and other public bodies which derive their powers from statute or regulation. The Charter does not operate as a limitation on private activity. A private employer, landlord or insurance company can discriminate as he, she or it pleases without committing a breach of the Charter. (The inapplicability of the Charter to private activity has not yet been judicially decided, and is not accepted by some lawyers, but in my opinion it is the correct interpretation of s.32(1): see Hogg, Canada Act 1982 Annotated (1982), 76-77; Tarnopolsky and Beaudoin, The Canadian Charter of Rights and Freedoms: Commentary (1982), 44-49, where the point is more fully developed.)

In this respect, the Charter is unlike the Human Rights Codes which have been enacted in every Canadian jurisdiction, and which do prohibit various forms of discrimination by private individuals, corporations or organizations in their capacity as employers, landlords and suppliers of goods, services and facilities. This opinion is not concerned with the question whether the insurance industry's rating criteria are in breach of provincial Human Rights Codes because that question is separate and independent from the question whether the insurance industry's rating criteria are in breach of the Charter. This opinion is concerned only with the latter question.

It is clear that an insurance company writing automobile insurance in a province in which there is no governmental participation in rate-fixing is free of the Charter. But it is not clear what degree of governmental participation would be regarded by the courts as the action of "the legislature" or "government" of a province (the terms used in s.32(1)) causing the Charter to become applicable. I have not researched the regulatory environment in which the automobile industry operates in each province. But I have been supplied with information by the Insurance Bureau of Canada, and I am relying on that information for the opinions expressed in the next few paragraphs. The situation is sc complex that it is possible that I have made some mistakes of detail. However, I describe the situation as I understand it in order to bring out the governing principles of law. If the situation in a particular province is not exactly as I have described it, it should be relatively easy to discern the governing principles of law from the following account and apply them to the correct situation.

The fact that automobile insurance is compulsory in all provinces, and must be available to everyone however poor a risk, has obviously been a major factor in creating a high degree of governmental intervention in the industry. In particular, in those provinces where the Facility Association covers the "residual market" for high risk drivers who cannot be placed privately, I understand that some form of government approval of rates in the residual market is required by statute or regulation. I am instructed that this is the situation in Prince Edward Island, Nova Scotia, New Brunswick, Ontario and Alberta. For reasons elaborated below, in my opinion, such a requirement in a statute or regulation would constitute action by "the legislature" or "government" of each province which would make the Charter applicable to rates in the residual market. A purely cooperative pooling of the high risks of the residual market, one which was not mandated by provincial law, would not by itself make the Charter applicable to rates in the residual market. I am instructed that this is the situation in Newfoundland, Quebec and the two Territories.

In three provinces, namely, Manitoba, Saskatchewan and British Columbia, all mandatory automobile insurance, including high risks, is written by a provincial Crown corporation. Private insurers are thus virtually excluded from these provinces, although private insurers can supply extended coverage (insurance above the mandatory limits of coverage or insurance against the deductible). In Quebec, the mandatory insurance is split between the provincial Crown corporation, which covers bodily injury, and private insurers, which cover physical damage. Private insurers can also supply extended coverage for bodily injury.

The rates that are set by a provincial Crown corporation would for that reason alone almost certainly be subject to the

Charter: see Hogg, Canada Act 1982 Annotated (1982), 77; Tarnopolsky and Beaudoin, Canadian Charter of Rights and Freedoms: Commentary (1982), 53-54. As well, I am instructed that in each of the four public-sector provinces the rates which are set by the Crown corporation are also approved by an official or board established by statute. For reasons elaborated later in this opinion, that approval is a second reason why the Crown corporation's rates would be subject to the Charter. In short, there can be no doubt that in each of the four public-sector provinces the Crown corporation's rates have been fixed by action of "the legislature" or "government" of the province (as required by s.32 of the Charter) and that the Charter is applicable to those rates.

I am instructed that in each of the four public-sector provinces (Manitoba, Saskatchewan, British Columbia and Quebec) the premiums charged by private insurers are not regulated. In Manitoba, Saskatchewan and British Columbia, private insurers can only offer extended coverage, and so it is the rates for privately-supplied extended coverage that are unregulated. In Quebec, private insurers can write not only extended coverage but also insurance against physical damage (the Crown corporation covers only bodily injury). These private rates are unregulated. In Quebec, as related earlier, there is also no regulation of rates in the high-risk private-sector residual market. In short, private-sector rates in the four public-sector provinces are not regulated.

In three of the private-sector provinces, namely, Alberta, Newfoundland and New Brunswick, rates of automobile insurance are subject to the prior approval of a rate review board established by statute. If the statutory board actually fixed the rates itself, it is clear that this would constitute action by "the legislature" or "government" of the province so as to make the Charter applicable. In my opinion, the courts would hold that prior approval of rates by the statutory board is no different in law from direct rate-fixing by the statutory board. I conclude, therefore, that the requirement of prior approval constitutes action by "the legislature" or "government" of the province so as to make the Charter applicable to all rates which are subject to the prior-approval system.

In one province, namely, Nova Scotia, there is a "file-and-use" system, under which rates are effective without prior official approval, but the rates must be filed with a rate review board which has the power of disallowance or variation. (Ontario has had a similar system in the statute book for many years, but it has never been proclaimed into force.) The file-and-use system in place in Nova Scotia must be distinguished from a "courtesy filing" in which the filing is made for information purposes only and the recipient board or official possesses no power of disallowance or variation. In my opinion, a court would regard the file-and-use system (under which a government board possesses the power of disallowance or variation) as no different for constitutional purposes than the prior-approval systems. Once again, there is action by "the legislature" or "government" so as to make the Charter applicable to the rates subject to the file-and-use system.

The provinces of Ontario and Prince Edward Island and the two territories remain to be considered. They have a private automobile industry, and have neither prior-approval nor file-and-use systems in place. They are in the same situation as the private-sector portion of the market in Quebec (physical damage) and in Manitoba, Saskatchewan and British Columbia (extended coverage), where there is also neither prior-approval nor file-and-use systems in place. In my opinion, where premium rates are set by private insurers, and are not regulated under either a prior-approval or a file-and-use system, the rating practices of the industry are not subject to the Charter.

My conclusion that unregulated private-sector rates are not subject to the Charter is not free of doubt. In every province automobile insurance (apart from extended coverage) is required by law to be held by all owners of motor vehicles. In every province private insurers are required by law to be licensed to carry automobile insurance. In every province there is a requirement of law of prior approval by the Superintendent of Insurance of the forms of all policies and endorsements used by the private insurers (which forms do not however disclose rating practices or amounts of premiums). In every province private insurers are subject to the supervision of the Superintendent of Insurance who is under an obligation to see that all laws are enforced. In Ontario (and probably elsewhere) those laws include a prohibition of "unfair" discrimination in rates and "unfair" practices generally (Insurance Act, R.S.O. 1980, c.218, ss.393, 394). The Superintendent of Insurance in Ontario certainly scrutinizes the classifications employed by insurers, and has, for example, insisted upon the abolition of the 04 classification (unmarried males aged 25 to 29) and the discontinuance of discrimination against elderly drivers - in rates as well as other practices. Thus, even in the provinces that do not approve rates, the regulatory regime is extensive and will impact upon some rating practices. It is possible that a court would accept the argument that the regulation of the automobile insurance industry is so pervasive that it sweeps all industry practices, including rating practices, into the Charter. But I think that the more reasonable conclusion is otherwise. Where rates have been set privately, in response to the play of market forces, and without intervention by government, it seems to me that there is no action by "the legislature" or the "government" of the province, and therefore, by virtue of s.32, the Charter does not apply.

The American case-law supports this conclusion. There is no precise equivalent of s.32 in the American Bill of Rights. But the cases establish that "state action" is required to make the Bill of Rights applicable. The mere fact that an industry is licensed and regulated by the state does not supply sufficient state action to subject the practices of the industry to the Bill of Rights, unless a state board or official has approved the very practice in issue, or unless government involvement is so pervasive that the industry and the government are in a "symbiotic relationship": see Moose Lodge Number 107 v. Irvis (1972) 407 U.S. 163 (private club could discriminate despite its possession of state liquor licence); Columbia Broadcasting System v. Democratic National Committee (1973) 412 U.S. 94 (television station could refuse editorial advertising despite governmental regulation of television industry); Jackson v. Metropolitan Edison Co. (1974) 419 U.S. 345 (electric company could deny a hearing to terminated customer despite its possession of a state-granted monopoly and government regulation which however did not extend to the termination practices of the company); and see generally Nowak, Rotunda, Young, Constitutional Law (1978), 464-468. I conclude that automobile insurance rates which have not been set by a Crown corporation, and have not been approved by government, are not covered by the Charter.

My conclusions as to the application of the Charter to the rate-fixing practices of the automobile industry are as follows:

1. The Charter applies to rates set by Crown corporations (Manitoba, Saskatchewan, British Columbia, Quebec-bodily injury).
2. The Charter applies to rates which are regulated, either by a prior-approval system (Newfoundland, New Brunswick, Alberta) or by a file-and-use system (Nova Scotia).
3. The Charter does not apply to rates set by private insurers which are not subject to government approval (whether prior-approval

or file-and-use) (Prince Edward Island, Quebec - physical damage, Ontario, the Territories).

4. The high-risk residual market is governed by the previous three rules. The Charter applies to rates in the residual market where they are set by a Crown corporation (Manitoba, Saskatchewan, British Columbia), or where they are subject to government regulation (Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Alberta), but not where the rates are set privately and are not subject to government regulation (Newfoundland, Quebec, the two Territories).

Quebec's override of Charter

Section 33 of the Charter permits the federal Parliament or a provincial Legislature to insert in a statute a clause declarin that the statute is to operate notwithstanding s.2 or ss.7 to 15 of the Charter. When this is done, the statute overrides the Charter instead of vice versa. By the use of s.33, s.15 of the Charter coul be overridden - and s.15 is the provision which prohibits discrimination generally. However, s.28 of the Charter cannot be overridden - and s.28 is the provision which (at least in concert with s.15) prohibits discrimination on the basis of sex. So the use of the override power probably does not solve the problem of discrimination by sex. In the succeeding sections of this opinion I conclude that the use of age and marital status by the automobile industry do not contravene the Charter anyway, but the use of sex probably does.

I mention s.33 in passing, not because it is likely to be used much, but because it has been used by Quebec with respect to *all* of Quebec's statutes. This has been done by Bill 62, enacted June 23, 1982, entitled "An Act Respecting the Constitution Act, 1982", 1982 L.Q., c.21. The validity of this use of s.33 has been challenged, but at first instance Bill 62 has been upheld (*Alliance de Professeurs de Montréal* v. *A.-G. Que*., Que. S.C., April 27, 1983, not yet reported). If Bill 62 is indeed valid, and if it has not been repealed by April 17, 1985 (when s.15 of the Charter comes into force in the other provinces), then s.15 of the Charter will not apply in Quebec. The public-sector automobile insurance rates (for bodily injury) would not be subject to s.15, but they probably still could not classify by sex because of s.28. The private-sector automobile insurance rates (for physical damage) are not subject to the Charter anyway, if I am right in the previous section of this paper (p. 13, above).

I conclude that s.33 is not an important consideration for this opinion, even in Quebec.

Age

Introduction

In those provinces in which the Charter applies to the automobile insurance industry in its rate-fixing practices (p.13, above), it is necessary to consider each of the three factors which have been suggested as offensive to the Charter. This section of the opinion will deal with age, the next section will deal with marital status, and the next section will deal with sex.

Section 15

Section 15 of the Charter provides as follows:

> 15.(1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.
>
> (2) Subsection (1) does not preclude any law, program or activity that has as its object the amelioration of conditions of disadvantaged individuals or groups including those that are disadvantaged because of race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

It will be observed that subsection (1) expressly prohibits "discrimination based on ... age". Subsection (2) permits "affirmative action" programs which make use of the prohibited factors, but this is not relevant to automobile insurance.

Section 1

The equality rights guaranteed by s.15 are not absolutes. Like other rights in the Charter, they are subject to s.1, which provides as follows:

> 1. The Canadian Charter of Rights and Freedoms guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.

The effect of s.1 is that classification by age is not a breach of the Charter if the classification is "reasonable", is "prescribed by law", and "can be demonstrably justified in a free and democratic society".

Burden of proof

The cases decided so far under the Charter have held (correctly, in my view) that the burden of persuading the court that the elements of s.1 have been satisfied rests on the party seeking to uphold the challenged law or practice: see *Quebec Association of Protestant School Boards* v. *A.-G. Que*. (1982) 140 D.L.R. (3d) 33, 57-59 (Que. S.C.); *Re Skapinker* (1983) 40 O.R (2d) 481, 487 (Ont. C.A.); *Re Southam Inc. and the Queen (No. 1)* (1983) 41 O.R. (2d) 113, 124-125 (Ont. C.A.). In our context, this means that the insurance industry will carry the burden of satisfying the court that its use of age (and sex and marital status) as a ratin factor is "reasonable", is "prescribed by law", and "can be demonstrably justified in a free and democratic society".

Prescribed by law

The requirement of s.1 that the challenged classification be "prescribed by law" is an initial difficulty. The rating classifications which are in issue are not contained in a statute or even in a regulation. In Canada Act 1982 Annotated (1982), 11, I suggested that:

> In the context of s.1, it seems plausible to insist that law be enacted by the federal Parliament or provincial Legislature so that the claimed restriction [on a guaranteed right] is the deliberate product of an open parliamentary process. However, the French version which uses the word "droit" (as opposed to "loi") suggests a broader meaning.

However, the courts have not accepted this narrow meaning of "law", and there are dicta to the effect that a limitation would be "prescribed by law" not only if it were contained in a statute, but also if it were contained in a regulation: Federal Republic of Germany v. Rauca (1982) 38 O.R. (2d) 705, 716 (Ont. H.C.); Ont. Film and Video Appreciation Society v. Ont. Bd. of Censors (1983) not yet reported (Ont. Div. Ct.); or in the common law: Federal Republic of Germany v. Rauca (1982) 38 O.R. (2d) 705, 716 (Ont. H.C.); Tarnopolsky and Beaudoin, The Canadian Charter of Rights and Freedoms: Commentary (1982), 62; Manning, Rights, Freedoms and the Courts (1983), 147.

It is probably safe to assume that the courts will continue to give a broad meaning to "law" in "prescribed by law". Probably, therefore, the prior approval of insurance rates by a statutory board or official, which applies in the public-sector provinces (see p.9, above) and in three of the private-sector provinces (see p.10, above), would suffice to make the approved rates 'prescribed by law". Probably, also, the file-and-use system, under which rates are subject to disallowance by a statutory board or official, which applies in one private-sector province (see p.10, above), would suffice to make the filed rates "prescribed by law".

In those provinces where there is no regulation of rates (neither prior-approval nor file-and-use), I have already given as my opinion that the Charter has no application (pp.11-13, above), so it is not necessary to justify industry practices in those provinces under s.1. The question whether insurance rates in those provinces are "prescribed by law" (they probably are not) is accordingly irrelevant.

I conclude that s.1's requirement that discrimination be "prescribed by law" is probably satisfied in those provinces with prior-approval or file-and-use review systems. In those provinces where the industry is still privately owned, and where rates are not subject to any form of government approval, the Charter does not apply and the question whether the rates are "prescribed by law" does not arise.

Reasonable limit that can be demonstrably justified in a free and democratic society

Section 1's requirement that a limitation on a fundamental freedom be "reasonable" is hard to deal with separately from the requirement that the limitation "can be demonstrably justified in a free and democratic society". These two requirements call for an evaluation of the purpose of a challenged classification, and, if the purpose is legitimate, an evaluation of the justification for the classification as a means of achieving that purpose: see generally Hogg, Canada Act 1982 Annotated (1982), 10; Tarnopolsky and Beaudoin, The Canadian Charter of Rights and Freedoms: Commentary (1982), 62-68; cases cited in Canadian Charter of Rights Annotated (Canada Law Book loose-leaf service) under s.1.

It should not be difficult for the insurance industry to discharge the burden of establishing the legitimacy of the purpose for which age (as well as sex and marital status) is employed as a factor. This involves explaining the insurance principles of pooling similar risks so that each insured pays no more and no less than the cost of the risk which he or she imposes on the system.

It should also not be difficult for the insurance industry to discharge the burden of establishing that age is a factor which it is reasonable to use in classifying risks, and that the use of age can be demonstrably justified in a free and democratic society. In my opinion, if it can be established that younger drivers as a class do have a higher risk of accidents than older drivers the court would regard the use of age as satisfactorily justified within the meaning of s.1. The industry's claims experience should by itself go a long way to provide the necessary justification. However, the industry would also need to show that age cannot easily be replaced by a non-prohibited criterion of classification, for example, length of driving experience. It will be necessary to develop evidence to the effect that younger drivers are not only less experienced than older drivers, but are less cautious: more inclined to speed, more inclined to take other risks, more inclined to take alcohol or drugs, and so on. Evidence of this kind will be necessary to satisfy the court that the industry is accurately interpreting its claims experience as related to age rather than to some other factor. But I point out that the basic proposition that young people are less cautious than older people is inherently plausible, and is likely to be accepted by a court.

Canadian case-law

No Canadian court has yet ruled on any age-classification under the Charter, and of course no court will have occasion to do so until April 17, 1985, when s.15 comes into force. But the Supreme Court of Canada has considered a challenge to an age-classification made under the equality clause of the Canadian Bill of Rights. In R. v. Burnshine [1975] 1 S.C.R. 693 the Court upheld a power in a federal statute which enabled offenders under 22 to be sentenced to indeterminate sentences in special correctional institutions. The effect of the law was that a person under 22 was liable to a longer sentence than a person over 22 for exactly the same offence. Martland J. for the majority of the Court held that the classification by age should be sustained because it pursued a "valid federal objective". Ritchie J. in a separate concurring opinion added that the age-classification should be sustained because it was "designed for the benefit of the individuals concerned so that they may be afforded the opportunity to play a useful and profitable role in society and to avoid the risk of maturing into hardened criminals". The issue in Burnshine was not quite the same as the issue under the Charter, because of the different language and status of the Canadian Bill of Rights. But the case suggests a readiness by the Court to accept age-classifications which pursue an intelligible purpose.

United States' case-law

In the United States it has also been held that longer (but rehabilitative) sentences for young offenders are not in breach of the due process or equal protection guarantees of the United States constitution: Cunningham v. United States (1958) 256 F. 2d 467 (U.S.C.A., 5th Cir.); Carter v. United States (1962) 306 F. 2d 283 (U.S.C.A., D.C. Cir.).

Generally speaking, classification by age has been accepted by the Supreme Court of the United States to be in compliance with the equal protection clause of the fourteenth amendment so long as there is a "rational basis" for the classification. Thus, in Massachusetts Board of Retirement v. Murgia (1976) 427 U.S. 307 the Court upheld a state law requiring police officers to retire at age 50. State law also required annual medical examinations for police officers between 40 and 50, and it was conceded that the plaintiff officer (who had been retired at 50) had consistently passed these examinations, was in excellent physical and mental health, and was fully capable of continuing to perform his duties as a police officer. Nonetheless, the Court held that the compulsory retirement at age 50 satisfied the rational basis test. The Court said (at pp.314-315):

> Through mandatory retirement at age 50, the legislature seeks to protect the public by assuring the physical preparedness of its uniformed police. Since physical ability generally declines with age, mandatory requirement at 50 serves to remove from police service those whose fitness for uniformed work presumptively has diminished with age. This clearly is rationally related to the State's objective.

The Court in Murgia refused to accept that age was a "suspect category" inviting "strict scrutiny", as it has held with respect to race and national origin. (A similarly strict scrutiny is applied where fundamental constitutionally-protected rights have been denied: see Carey v. Population Services International (1977) 431 U.S. 678 (prohibition on sale of contraceptives to children under 16 held unconstitutional); but this exception is not relevant for present purposes.) The Court, in holding that age was not a suspect category, pointed out (at pp.313-314) that age "marks a stage that each of us will reach if we live out our normal span", and, unlike "race or national origin", age had never been the basis of systematic discrimination in America. (The standards of judicial review under the equal protection clause of the fourteenth amendment of the Constitution of the United States are discussed in more detail in connection with classification by sex later in this opinion, pp. 34-42, below).

Other age classifications

Wherever age is used as a proxy for maturity, responsibility or competence, a stereotype is created which will not be accurate for particular individuals. There is a minimum age for obtaining a driving licence, for example, although some people under that age would no doubt make excellent drivers. There is a minimum drinking age, although some people under that age would no doubt use alcohol responsibly.

The alternative to the use of age as the regulatory criterion is an individualized judgment as to the capacity of each person to perform the regulated act, whether it be driving, drinking, voting, making a contract, or whatever. The individualized judgment is so plainly impracticable that our laws have to use objective, general criteria to define capacity, and in many contexts age seems a necessary and reasonable criterion. For this reason, our laws are shot through with classifications by age: driving, drinking, voting, getting married, making contracts, making wills, owning guns, attending school, leaving home, viewing restricted movies, joining the armed forces, being employed, receiving welfare, are among the activities which in all Canadian jurisdictions are regulated by age. All of the laws on the foregoing topics (and a much longer list could no doubt be compiled) classify by age, and therefore ostensibly breach s.15 of the Charter, but I have no doubt that few if any of them will be struck down by the courts. They will be upheld under s.1 as reasonable limits that can be demonstrably justified in a free and democratic society.

The purpose for which the automobile insurance industry uses age actually has quite close analogies in the driving and drinking laws. If it is reasonable to establish a minimum age for driving, is it not also plausible to find that drivers who have recently achieved the requisite age are not yet as competent as older drivers? And, if so, is it not reasonable for the insurance industry to act on that finding? If it is reasonable to establish a minimum drinking age, is it not also plausible to find more alcohol abuse by drivers who have only recently achieved the requisite age than by older drivers? And, if so, is it not reasonable for the insurance industry to act on that finding?

It is necessary to conclude that the insurance industry, by seeking to continue to use age as a rating factor, is not clinging to a criterion generally abandoned elsewhere in our society, but is rather continuing to use a criterion which is widely accepted as relevant in many other societal contexts in Canada as well as in other countries.

Conclusion

While age is a prohibited classification under s.15 of the Charter, s.15, like other guarantees, is subject to s.1, which would sustain an age classification which is "reasonable" and "can be demonstrably justified in a free and democratic society".

Provided that a court is presented with evidence that age is a relevant factor in the assessment of the risk of automobile accidents, in my opinion, a court would find that the use of age as a rating factor for automobile insurance is "reasonable" and "can be demonstrably justified in a free and democratic society". Accordingly, even after s.15 comes into force on April 17, 1985, in my opinion, the use of age as a rating factor for automobile insurance will not contravene the Charter.

Marital status

Sections 15 and 1

Marital status as a rating factor for automobile insurance raises a similar set of issues as age. To be sure, s.15 of the Charter (the text of which is reproduced, p.17, above) does not expressly prohibit discrimination based on marital status, whereas s.15 is express in its prohibition of discrimination based on age. But it is clear that the list of prohibited classifications in s.15 is not exclusive, because it is introduced by the words "in particular". In my opinion, the constitutionality of classification by marital status, like classification by age, depends upon whether the classification can be justified under s.1 of the Charter (the test of which is reproduced, p.18, above), that is, whether it is "prescribed by law", and whether it is a "reasonable" limit which "can be demonstrably justified in a free and democratic society".

Prescribed by law

The question whether marital status as a rating factor is "prescribed by law" is exactly the same issue as whether age is prescribed by law. My opinion on that issue is set out at pp. 19-20, above, with my conclusion at p. 20, above.

Reasonable limit that can be demonstrably justified in a free and democratic society

Is marital status as a rating factor a "reasonable" factor, and one which "can be demonstrably justified in a free and democratic society"?

Marital status is used as a classification in many laws, especially laws relating to the economic situation of families, for example, entitlement to income-tax deductions, to public income-support, housing and other benefits, to spousal maintenance, and so on. So that it could hardly be argued that there is anything inherently objectionable in the use of marital status as a characteristic carrying legal consequences.

However, there are two reasons which lead me to believe that the insurance industry will have more difficulty in supporting the use as a rating factor of marital status than the use of age. First, whereas age is a classification which is widely used in our laws as a proxy for a requirement of maturity, responsibility and competence (see pp. 25-27, above), marital status is to my knowledge nowhere used for that purpose. Thus, the industry's use of marital status is more novel, and certainly less plausible, than its use of age. Secondly, there is the awkward problem of defining marital status, given the variety of living-together relationships now generally accepted by society. In other areas of the law where marital status is important the tendency now is to include "common law" relationships, although these require arbitrary definitions. If the insurance industry were to exclude common law relationships in its statistics of previous claims and its rating practices, it might be hard-pressed to justify the use of marital status as a rating factor. On the other hand, a court would undoubtedly be realistic as to the kind of definition which it is practicable for the industry to administer.

The considerations outlined in the previous paragraph suggest to me that the industry will have to make out a persuasive case for its use of marital status as a factor in setting automobile insurance rates. But I do not believe that there is anything inherently objectionable about the use of marital status (unlike race or national origin, for example), and so I do not feel that the burden of persuasion is impossible to discharge. The question is: can the industry establish the predictive force of the criterion? If a reasonably sound case can be made for the predictive value of marital status as defined by the industry, and for the impracticability to the industry of other definitions of marital status, then it is likely that a court would hold that the use of marital status as a rating factor for automobile insurance is "reasonable" and "can be demonstrably justified in a free and democratic society".

Conclusion

I conclude, although with some doubt, that, even after s.15 comes into force on April 17, 1985, the Charter will not prohibit the use of marital status as a rating factor for automobile insurance.

Sex

Sections 15 and 1

Sex, like age, is one of the bases of discrimination which is expressly prohibited by s.15 of the Charter. (The text of s.15 is reproduced, p. 17, above.) If the Charter contained no other provision regarding sexual discrimination, the constitutionality of a sexual classification would turn on whether the classification could be justified under s.1 of the Charter (the text of which is reproduced, p. 18, above), that is, whether the classification is "reasonable", is "prescribed by law", and "can be demonstrably justified in a free and democratic society". The analysis of the validity of a sexual classification would not be essentially different than the analysis of age and marital status.

Section 28

It is entirely possible that the last two sentences do accurately state the law, but the position is rendered doubtful by the existence of s.28 of the Charter. Section 28 of the Charter provides as follows:

> 28. Notwithstanding anything in this Charter, the rights and freedoms referred to in it are guaranteed equally to male and female persons.

The meaning of s.28 is far from clear. However, it certainly seems to reinforce the prohibition on sexual discrimination which is already in s.15. But while s.15 is subject to s.1, the opening words of s.28 ("Notwithstanding anything in this Charter") suggest that s.28 is not subject to s.1. This is the view taken (somewhat hesitantly) by the commentators: Hogg, Canada Act 1982 Annotated (1982), 72; Tarnopolsky and Beaudoin, The Canadian Charter of Rights and Freedoms: Commentary, (1982), 436-437; Tarnopolsky, "The Equality Rights in the Canadian Charter of Rights and Freedoms" (1933) 61 Can. Bar Rev. 242, 259; Gold, "A Principled Approach to Equality Rights" (1982) 4 Supreme Court L.R. 131, 152. The apparent implication of this view that s.28 is not subject to s.1 is that sexual classifications are absolutely forbidden; they are unconstitutional per se; they are not saved even if they are "reasonable", "prescribed by law" and "can be demonstrably justified in a free and democratic society".

This extreme position, which would condemn all sexual classifications, is probably not the correct interpretation of s.28 because it is hard to reconcile with s.15(2). Section 15(2), which makes clear that s.15(1) does not preclude affirmative action programs, expressly refers to programs in favour of "those that are disadvantaged because of ... sex". In interpreting the Charter (like any other instrument) the courts will want to give some effect to each of its provisions; yet the absolutist interpretation of s.28 would prohibit even affirmative action programs in favour of women (or men) despite their explicit recognition in s.15(2). The courts are more likely to prefer an interpretation of the Charter which avoids a clash between ss.28 and 15(2) and which gives some effect to the reference to sex in s.15(2). Tarnopolsky and Gold, in the works referred to in the previous paragraph, suggest that s.15's prohibition of discrimination (even when reinforced by s.28) is not to be interpreted as an absolute prohibition of all legislative classifications, but only of those classifications which are unreasonable and unjustified. In other words, even without the aid of s.1, a reasonable and justified classification by sex could be upheld.

This is how the equal protection clause of the fourteenth amendment to the Constitution of the United States has been interpreted. There is no equivalent of s.1 in the Constitution of the United States; yet the guarantee of "equal protection of the laws" has not been construed as an absolute prohibition of all legislative classifications, but rather as authorizing review by the courts of each classification's rationale and legitimacy. (A more detailed account of the American law is given later in this opinion: pp.34-42, below.) One difficulty with the application to the Charter of the American theory that requirements of rationality and legitimacy are "built into" the guarantee of equal protection is that it tends to render s.1 of the Charter redundant in its application to s.15.

The foregoing analysis demonstrates, I think, that s.28 of the Charter is an obscure provision which does not fit easily into the rest of the Charter, and certainly does not sit easily with s.15. Section 28 was not in the original (October 1980) version of the Charter but was included later. This is probably the reason for its poor integration into the Charter, but it does not help those of us who have to interpret it.

It is possible that the courts will read s.28 as imposing an absolute prohibition on classifications by sex, however reasonable or well justified. On this view, obviously, the insurance industry would have to abandon sex as a rating factor.

In my opinion, however, it is more likely that the courts will find a way (perhaps by following Tarnopolsky and Gold) to treat s.28 as a qualified prohibition only and one which would not condemn all classifications by sex. However, if this moderate approach prevails (as I believe it will), there is no doubt that the courts will insist upon very strict standards of reasonableness and justification in order to uphold a sexual classification in the face of s.28. The question which remains is: What standards of reasonableness and justification would the industry have to satisfy in order to defend the use of sex? And can the industry provide evidence which would meet those standards?

United States' case-law

As noted earlier in this opinion, the fourteenth amendment of the Constitution of the United States guarantees the "equal protection of the laws". In applying this guarantee to the review of allegedly discriminatory laws, the Supreme Court of the United States has developed a "two-tier" standard of review.

The upper "tier" includes classifications by race (and national origin), which the Court has held are "suspect". Also included in the upper tier (although not relevant to the present opinion) are laws which, although employing other kinds of classifications, abridge a fundamental right, such as the right to vote. For classifications coming within the upper tier the standard of review is usually described as "strict scrutiny". Such classifications are presumed to be unconstitutional, and will be upheld only if the government establishes that the classification is necessary to a "compelling state interest" and that there is no alternative means of vindicating that state interest. Because it is hard for government to discharge this burden, the practical effect of including a classification in the upper tier is that it is very likely to be held to be unconstitutional. In particular, with the exception of the wartime case of the Japanese Americans, Korematsu v. United States (1944) 323 U.S. 214, the modern Supreme Court of the United States has invariably struck down laws which classified by race. The school desegregation case, Brown v. Board of Education (1954) 347 U.S. 483, is the most famous of many such cases.

The lower "tier" of judicial review under the equal protection clause includes all classifications which are not "suspect" and which do not affect "fundamental" rights. For these classifications a more relaxed standard of judicial review, often described as "minimal scrutiny", is employed. It is sufficient if there is a "rational basis" for the classification. A good example is Massachusetts Board of Retirement v. Murgia (1976) 427 U.S. 307 (mandatory retirement of police officers upheld) which is discussed earlier in this opinion, p. 17, above. Another case often cited is Dandridge v.

Williams (1970) 397 U.S. 471 (dollar limit on income-support for large families upheld). Because it is easy for a government to find a rational basis for a law, the practical effect of including a classification in the lower tier is that it is very unlikely to be held to be unconstitutional.

Sex discrimination has recently disturbed this neat two-tier system, leading to a standard of review which has sometimes been described as "intermediate scrutiny". At first, classifications by sex came within the lower tier and were accordingly usually upheld: e.g., Goesart v. Cleary (1949) 335 U.S. 464 (women ineligible for licensing as bartenders unless related to owner of bar); Hoyt v. Florida (1961) 368 U.S. 57 (women ineligible for mandatory jury service). But in Reed v. Reed (1971) 404 U.S. 71 the Court unanimously struck down a state law which gave preference to men over women in obtaining appointment as administrator of a decedent's estate, and the Court seemed to be applying a somewhat stricter standard of review than the rational basis test. Then in Frontiero v. Richardson (1973) 411 U.S. 677 the Court, by a majority of eight to one, struck down a federal law which prohibited a married female airforce officer from obtaining the same housing and medical benefits as were available to a married male airforce officer. In this case four of the eight judges in the majority held that sex was a suspect category like race or national origin and was accordingly subject to upper tier "strict scrutiny". But the other four majority judges left this issue open, holding that the law could not even satisfy the rational basis test.

The next important case was Craig v. Boren (1976) 429 U.S. 190, the facts of which have some affinity to our present problem. A state law prohibited the sale of beer to males under 21 and females under 18, thereby discriminating against males aged 18 to 21. The state offered statistical evidence which showed that young males were arrested for "driving under the influence" and for "drunkenness" far more frequently than young females, that young males were killed in traffic accidents more frequently than young females, that young males were more inclined to drink and drive than young females, and that drunkenness was a factor in many accidents. Despite this evidence, the Court held, by a majority of seven to two, that the discrimination against young males was unconstitutional. In deciding the case Brennan J. (who had advocated strict scrutiny in Frontiero v. Richardson), with the concurrence of five others, now articulated a test which fell somewhere in between strict scrutiny and minimal scrutiny. He said (at p. 197) that "classifications by gender must serve important governmental objectives and must be substantially related to achievement of those objectives". And he concluded (at p. 204) that this standard had not been met: "the showing offered by the [government] does not satisfy us that sex represents a legitimate, accurate proxy for the regulation of drinking and driving".

After Craig v. Boren the "intermediate scrutiny" which it stipulated was applied in a number of cases involving sexual classifications. In most cases the classification was struck down: although "statutory rape", an offence which in California could be committed only by a male, was upheld (Michael M. v. Superior Court (1981) 450 U.S. 464), as was the male-only registration system for the military draft (Rostker v. Goldberg (1981) 101 S. Ct. 2646). (The cases are summarized in Nowak, Rotunda, Young, Constitutional Law (1978 and 1982 supplement), 607-619.)

The most recent constitutional case at the time of writing is Mississippi University for Women v. Hogan (1982) 102 S.Ct. 3331 in which the Court, by a majority of five to four, held that the Mississippi University for Women's all-female admissions policy violated the equal protection clause. O'Connor J. for the majority articulated a standard of review that was higher than the Craig v. Boren standard. She said (at p. 3336) that an "exceedingly persuasive justification" was needed to sustain a gender-based classification; and in a footnote (also at p. 3336) she raised and left open the question whether sex should not now be treated as a "suspect" category and thus subject to the same strict scrutiny as race or national origin.

The general trend of this brief history is obvious. Classification by sex has rapidly moved from the lower "tier", which includes most other classifications and which attracts only minimal judicial scrutiny, to a position which is close to the upper tier, which includes race and national origin and which attracts strict scrutiny. It seems likely, if not inevitable, that sex will soon be treated as no different from race and national origin, in which case virtually all sexual classifications will violate the equal protection clause.

Two further cases should now be considered. Although they are not constitutional cases, they are cases in which the Supreme Court of the United States reviewed (and condemned) the use of sex-based longevity tables in the computation of retirement pensions, and they have a special relevance to the subject of this opinion.

The first case is Los Angeles Department of Water and Power v. Manhart (1978) 435 U.S. 702, in which the Supreme Court of the United States reviewed a city's requirement that its female employees make higher contributions to its pension fund than its male employees. The requirement was based on the fact that (as the Court acknowledged at p. 704) "as a class, women live longer than men", so that the cost of a pension for the average retired female was higher than for the average retired male. Nonetheless, the Court held by a majority of five to three (or six to two - Blackmun J.'s position is not clear; Brennan J. did not participate in the decision; hence only eight judges) that the difference in contributions violated Title VII of the Civil Rights Act of 1964, which made it unlawful for an employer to discriminate against an employee on the basis of (inter alia) the employee's sex.

Manhart was concerned with the pay-in phase of a retirement plan. The pay-out phase came under review in Arizona Governing Committee v. Norris (1983), not yet reported. The State of Arizona, by arrangement with private insurance companies, offered its employees a retirement plan under which the employees could make tax-deductible contributions while employed, and on retirement would receive those contributions together with their accumulated earnings. On retirement, the employee could take his or her benefit under the plan in one of three forms: (1) as a single lump-sum payment of the total amount accrued; or (2) as a series of fixed monthly payments for a fixed number of years; or (3) as a life annuity, that is, a series of fixed monthly payments for the balance of the retired employee's life. No distinction was drawn between men and women who on retirement chose options (1) or (2): equal contributions yielded equal payments. But under option (3) (the life annuity) women received lower monthly payments than men who had made the same contributions. The lower payments reflected, of course, the fact that women on average live longer than men and would therefore on average draw their payments for a longer period of time. The Court recognized that the actuarial value at the time of retirement of the woman's annuity would be exactly the same as the value of the man's annuity: "the lower value of each monthly payment she is promised is offset by the likelihood that she will live longer and therefore receive more payments". Nonetheless, the Court, by a majority of five to four, followed the earlier Manhart case to hold that the difference in the monthly payments violated Title VII of the Civil Rights Act of 1964: "the classification of employees on the basis of sex is no more permissible at the pay-out stage of a retirement plan than at the pay-in stage". Despite the undisputed correlation between sex and life expectancy, the use of a sex-based classification to predict longevity was proscribed. Despite the undisputed greater costs of providing equal monthly payments to women, equal monthly payments had to be provided (or the annuity option abandoned - the course in fact followed by the state after the lower court decisions).

Not too much should be read into the Manhart and Arizona cases. They held only that classification by sex was proscribed by Title VII of the Civil Rights Act of 1964, a statute prohibiting discrimination in employment. As O'Connor J. pointed out in her separate concurring opinion in Arizona, neither case addressed "the larger issue of whether considerations of sex should be barred from all insurance plans, including individual purchases of insurance [i.e. purchases outside employment]". As both Marshall (for the plurality) and O'Connor JJ. pointed out in Arizona, neither case addressed the constitutional issue of whether sex-based classifications in state pension plans violated the equal protection clause of the fourteenth amendment. Interestingly, the District Court Judge in the Arizona case at first instance did address the constitutional issue and held that the Arizona plan did not violate equal protection, although the Judge held that the plan did violate Title VII: (1980) 486 F. Supp. 645, 651. The constitutional ruling was not appealed and was therefore not considered by either the Court of Appeals for the Ninth Circuit or the Supreme Court of the United States.

But when all this is said, it is plain that sex-based classifications are becoming increasingly difficult to sustain in the face of legal challenge - upon whatever legal ground. What makes Manhart and Arizona so disturbing from the point of view of the insurance industry is the Court's rejection of sex-based classification in a context (the prediction of mortality) where the relevance of sex cannot be (and was not) disputed, and where the classification was not based on an archaic stereotype about the role of women in society.

The American Court seems to be moving to a position where it will come to treat sexual classifications as similarly objectionable to racial classifications. In Manhart Stevens J. for the majority (at p. 709) pointed out that the life expectancy of black Americans was six years shorter than that of white Americans (65.9 years versus 72.2 in 1973); yet the use of race-based longevity tables would clearly offend Title VII. This example is a telling one, because I think it would be widely accepted in the United States (as well as in Canada) that the public policy in favour of a race-neutral society is so powerful that it simply has to override virtually all other considerations, even to the point of compelling actuarially unsound insurance practices. The "raising of consciousness" in the matter of sex which has been so successfully achieved by women's groups is gradually establishing a similarly powerful public policy in favour of a sex-neutral society. This is gradually being reflected in the policies of all branches of government, including the courts, in the United States.

Canadian speculations

In Canada the movement in favour of equal rights for women has led to the inclusion in the Charter of s.28 (which is quite similar to the now-lapsed proposed equal rights amendment in the United States), and to the exclusion of s.28 from the override power of s.33. It will be recalled that s.28 was not in the original (October 1980) version of the Charter, and after it was included it was initially made subject to override under s.33. These important constitutional victories were gained by women's groups during the negotiation of the constitutional settlement of 1982. Those same groups, along with other civil liberties groups and many individuals, will be vigilant on all fronts, including litigation, to solidify these constitutional gains. The dynamics of the situation are not changed all that much where the alleged discrimination is in favour of women rather than men (as in the case of automobile insurance premiums). Discrimination against men will be fought just as hard as discrimination against women by those who believe in a sex-neutral society, the reasoning being that in the long run women will gain more overall than they will lose. (See Wendy W. Williams, "Sex Discrimination under the Charter" (1983) 4 Can. Human Rights Reporter 1, 4; and note that the raising of the standard of judicial review in the United States has occurred in cases involving discrimination against men, namely, Craig v. Boren, discussed p. 37, above, and Mississippi University for Women v. Hogan, discussed p. 38, above.)

In a legal opinion I do not usually embark on flights of sociology or politics, as I suppose the previous paragraph could be characterized. But it is idle to ignore developments in Canada's political culture which I believe cannot fail to influence the Supreme Court of Canada, just as they have obviously influenced the Supreme Court of the United States. The Supreme Court of Canada has not yet decided any Charter cases, although it has already granted leave to appeal in eleven cases (none of them germane to our present problem). I believe that the Supreme Court of Canada will be anxious to allay the oft-repeated fear that it is going to "water down" the Charter, and that it will be anxious not to disappoint the expectations of minorities and women which were generated during the constitutional debates in 1980-82. The two decisions under the statutory Canadian Bill of Rights which arguably tolerated sex-based discrimination, namely, A.-G. Can. v. Lavell [1974] S.C.R. 1349 (Indian women denied Indian status if married to non-Indian) and Bliss v. A.-G. Can. [1979] 1 S.C.R. 183 (pregnant women denied unemployment insurance benefits), received virtually universal criticism, and the Court will I believe wish to start afresh, armed as it now is with the stronger language and entrenched status of the Charter: see Tarnopolsky and Beaudoin, The Canadian Charter of Rights and Freedoms: Commentary (1982), 421-423; Gold, "A Principled Approach to Equality Rights" (1982) 4 Supreme Court L.R. 131, 135-145.

Conclusion

One view is that ss.15 and 28 of the Charter absolutely prohibit all sexual classifications: pp.31-32, above. If that is correct, the use of sex as a rating factor for automobile insurance will (after s.15 comes into force on April 17, 1985) contravene the Charter.

The preferable view is that ss.15 and 28 would admit at least affirmative action programmes in favour of women (which are expressly referred to in s.15(2)) and are therefore not an absolute prohibition on sexual classifications: pp. 32-34, above. However, the absolute language of s.28, the increasingly strict approach of the American courts, and the climate of opinion in favour of sexual neutrality, all combine to suggest that the Supreme Court of Canada will be very reluctant to sanction a sexual classification. While the insurance industry can undoubtedly establish that young men have more automobile accidents than young women, there is more room to dispute the use of sex than there is with respect to age. As soon as one starts to speculate on the likely reasons for greater male accidents, they tend to suggest stereotypical sex roles in which the young male is more dominant and aggressive (more often the driver) and more reckless than the young female. The industry can say, of course, that for whatever reasons sex is in fact correlated to risk, and therefore should be used as a factor in setting premiums. But I believe that it is likely that the Court would find this reasoning to be at least suggestive of stereotypical sex-roles and as not sufficiently compelling to overcome the heavy burden of justifying a sexual distinction in the face of s.28 of the Charter.

I regret that so much of this section of the opinion is necessarily speculative (and therefore may be proved wrong), but in my opinion the use of sex as a rating factor for automobile insurance will (after s.15 comes into force on April 17, 1985) probably contravene the Charter.

Conclusions

Omitting the qualifications and complications which I hope are sufficiently explained in the body of this opinion, my opinion may be summarized as follows. After April 17, 1985, when s.15 of the Charter comes into force:

1. The use of age as a rating factor for automobile insurance will not contravene the Charter.
2. The use of marital status will probably not contravene the Charter.
3. The use of sex will contravene the Charter.
4. In provinces where rates are set by private insurance companies, and are not subject to any form of government approval, the Charter does not apply to those rates at all: even sex can be used as a rating factor for those rates in those provinces.

P. W. Hogg

PETER W. HOGG

APPENDIX XIII

AGENCY CONTRACT

This contract replaces all contracts previously made

Dated .... 19.....

1. The appointment of ....
(Hereinafter called the Agency)

Address ....

City or Town ....

as Agent of ....
(Hereinafter called the Company)

is hereby accepted and confirmed with authority, subject to the Company's underwriting instructions, (1) to sign and deliver such Policies and Renewal Certificates of the Company as are supplied to the Agency and (2) to bind the Company by issue of such "Cover Notes" and/or "Certificates" of the Company and/or "Policies" as may be designated for use by the Agency, subject to the following conditions:

2. The Agency is required to report to the Company without delay all commitments made on its behalf and to conform to and promptly comply with such underwriting or other instructions as are issued.

3. The Agency is authorized to receive the premiums due to the Company in respect to the above and all monies so received shall be securely and honestly held by it as fiduciary trust funds and shall be used by it for no personal or other purpose whatever. The Agency agrees to pay the Company all premiums accruing on insurance written in the Company whether collected by the Agency or otherwise.

4. The Agency's remuneration shall be as defined by the schedule of commissions hereon, and such schedule shall govern upon the net cash premiums of the insurances paid by agent to the Company. In the case of cancellation of policies the commission on rebates must be the same as the commission allowed upon the premiums of the policy, and shall be borne by the Agency herein, whether the cancellation is effected prior or subsequent to the termination of this agreement.

5. All monies due by the Agency to the Company in each month, less its commission, shall be paid by it to the Company within 60 days from the end of the month in which the business is written. Subsequent credits to be included in the following month's account.

6. Payments made by the Agency to the Company in respect of any premiums or portions thereof, which have not been paid to the Agency by the Insured, shall be considered only as deposits made by the Agency with the Company to secure the Company against loss of earned premiums and neither as actual payments of said premiums by or on behalf of the Insured nor as premium or premiums actually paid by the Insured.

7. This Agreement may be terminated by written notice at the pleasure of either party when all monies owing or to become owing by the Agency to the Company shall immediately become payable and any liability for these monies shall not be discharged until these are paid by the Agency to the Company. The Agency will forthwith return to the Company all its documents and supplies then in the Agency's possession, but retaining those supplies which have become a record of business in force, and such records shall be deemed to be the property of the Agency.

8. Upon termination of this agreement, the Company will hold inviolate the records of the risks produced through this Agency as the asset of the Agency and not of the Company, and will neither interfere with the current risks or renewals of same nor divulge to any other interest any information pertaining thereto, except only (a) in case the Agency is in default in account with the Company, when the Company reserves the right to deal with this subject as it may then see fit, and (b) the subsequent premiums due upon non-cancellable Policies or Bonds may, at the discretion of the Company, be collected direct and the commission paid or credited to the account of the generating Agency.

9. It is expressly understood and agreed that the word "Agent" wherever used in this Agreement shall include and be binding upon the heirs, executors, administrators, successors and assigns of the Agent as the case may be, and that, in the case where the Agent is a partnership or corporation, the person or persons who have signed these presents on behalf of the partnership or corporation are personally, jointly and severally responsible between themselves and with the agent for all the obligations of the agent under these presents without the privileges of discussion and division.

Executed on behalf of the Agency by

.... Executed on behalf of the Company by:

....

Authorized Officers

....

(Signatures of all Authorized Officers of the Agency)

APPENDIX XIV

ANNUAL PREMIUM QUOTATIONS FOR EACH EXAMPLE

Each table shows the cost of one year of car insurance for sixteen different insurance companies. The twelve largest car insurers are listed in alphabetical order in the first part of each table.

The second part of each table shows four additional insurers whose rates are among the lowest for that example. If one of the top twelve insurers also has one of the lowest rates, its rates are not repeated under the lowest quotes heading.

Example 1

Coverages and Limits
BI/PD 20/40/10 or 50 CSL
PPI $1,000,000
PIP Med. & work loss excess, $300 ded. each
UM 20/40 COLL Broad, $100 ded.
COMPREHENSIVE $50 ded.

Car
1980 Ford Fiesta

Driver
Principal, age 20, Licensed 3 yrs.
Single—no dependents, 4 mi. one-way commute
5,000 mi./yr., No tickets/accidents

Example 2

Coverages and Limits
BI/PD 20/40/10 or 50 CSL
PPI $1,000,000
PIP Med. & work loss excess, $300 ded. each
UM 20/40 COLL Broad, $100 ded.
COMPREHENSIVE $50 ded.

Cars
Car 1—Wife—1981 Chevy Citation
Car 2—Husband—1984 Olds Cutlass Ciera

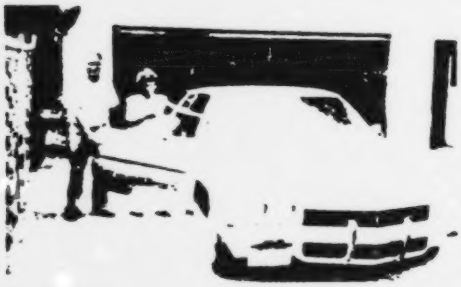
Drivers
Parents, age 35, both principal drivers
Wife: 1 mi. commute one way
2000 mi./yr.
Husband: 12 mi. commute one way
10,000 mi./yr.
Both drivers have no tickets/accidents
Two children

Example 3

Coverages and Limits
BI/PD 20/40/10 or 50 CSL
PPI $1,000,000
PIP Med. & work loss excess, $300 ded. each
UM 20/40 COLL Broad, $100 ded.
COMPREHENSIVE $50 ded.

Cars
Car 1—Wife—1983 Chevrolet Camaro
Car 2—Husband—1981 Olds Omega 2 dr.

Drivers
Married couple—age 27
Wife: 3 mi. one way commute, 7000 mi./yr.
No tickets/accidents
Husband: 5 mi. commute one way, 11,000 mi./yr.
Five (5) eligibility points
2 pt. ticket + 3 pt. accident
No children

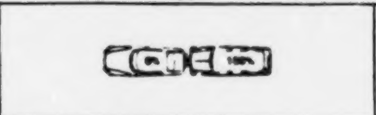
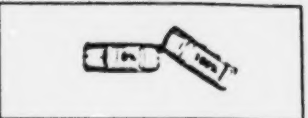
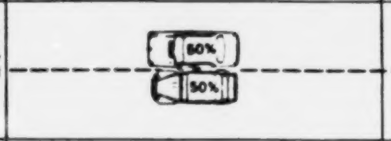
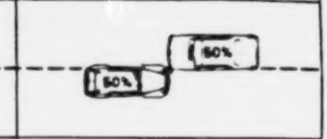
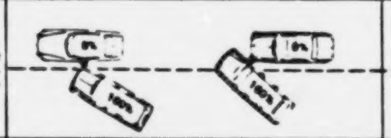
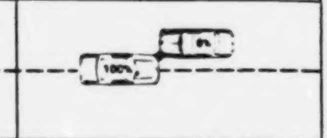
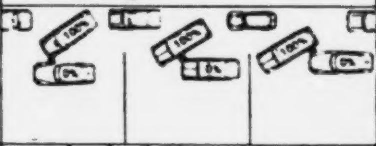
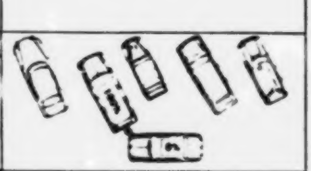
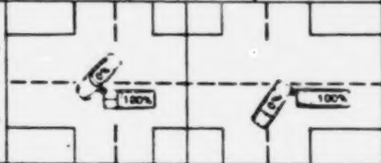
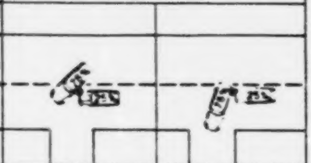
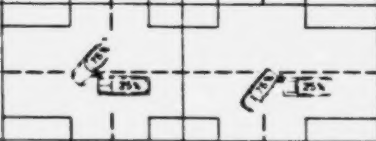
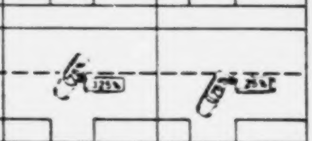
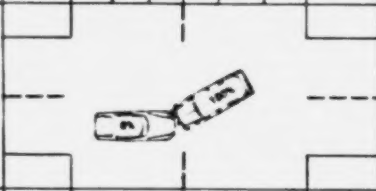
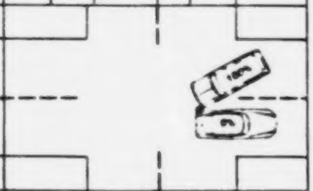
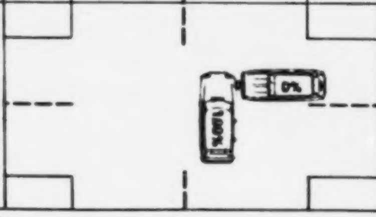
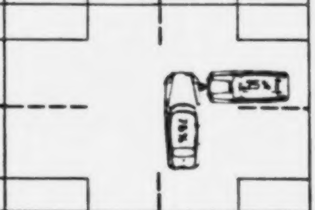
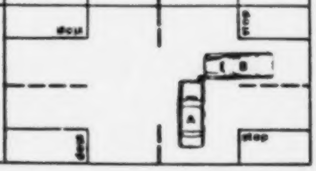


Example 4

Coverages and Limits
BI/PD 20/40/10 or 50 CSL
PPI $1,000,000
PIP Med. & work loss primary, no ded.
UM 20/40 COLL Broad, $100 ded.
COMPREHENSIVE $50 ded.

Car
1975 Chevrolet Impala 4 dr. Sedan

Drivers
Retired couple, age 66
Pleasure use No tickets/accidents
No earned income/No dependents 2,500 mi./yr.

Situations		A	B
1	Vehicles in the same lane and direction, one vehicle struck from behind. **See Special Note #1**		
2	Vehicles in adjacent lanes, same or opposite direction, both vehicles on or over centre-line or where point of impact cannot be determined. **See Special Note #2**		
3	Vehicles in adjacent lanes same direction with one vehicle changing lanes, or opposite direction with one vehicle over centre line. **See Special Note #2**		
4	Vehicle pulling out from a parked position as another passes.		
5	**(I) EXCEPT ONTARIO** One vehicle turning left while being overtaken (A) at intersection 0/100 in favour of left turning vehicle (B) at any driveway 75/25 in favour of overtaking vehicle		
	(II) IN ONTARIO ONLY One vehicle turning left at intersection or at any driveway, as other vehicle overtaking to pass shall be 75/25 in favour of overtaking vehicle See Special Note #5		
6	Intersection – vehicles in opposite directions, one vehicle turning left. Applicable in all situations except those described in Notes (a) or (g)		
7	**A – EXCEPT ONTARIO** Intersection – no traffic lights, vehicles proceeding at right angles, vehicle on right has right of way – 0/100 in favour of vehicle on right. **B – IN ONTARIO ONLY** Intersection – no traffic lights, vehicles proceeding at right angles, vehicle on right has right of way – 75/25 in favour of vehicle on right.		
8	Where an accident occurs at an intersection equipped with STOP signs on each corner, the right of way applies unless it is proven: (a) that B failed to stop (B to be held fully liable) or (b) that both A & B failed to stop (both to be held equally liable)	A B a) 0% 100% b) 50% 50%	

APPENDIX XV

APPENDIX XVI

A DRAFT FOR CONSULTATION: A CLASSIFICATION SYSTEM FOR AUTOMOBILE INSURANCE

AVANT-PROJET AUX FINS DE CONSULTATION: LE SYSTÈME DE CLASSIFICATION POUR L'ASSURANCE-AUTOMOBILE

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TO ALL INTERESTED PERSONS

A Classification System for Automobile Insurance: A Draft for Consultation is being circulated with the intention of soliciting comments and suggestions for the proposed regulation. The Ministry recognizes that initiatives related to automobile insurance are of significance to the public at large, and that it is important to take the opportunity to gain the views and suggestions of those who will be directly affected. It is for this reason that the Consultation Draft is being made available for scrutiny and response.

The Ministry of Financial Institutions looks forward to receiving comments and suggested changes.

Those who wish to respond to the Consultation Draft are urged to do so before the deadline of March 31, 1988. Please address comments in writing to:

Robert F. Nixon,
Minister of Financial Institutions,
Consultation Draft,
Ministry of Financial Institutions,
555 Yonge Street, 8th Floor
Toronto, Ontario,
M7A 2H6.

Additional copies of the Consultation Draft may be purchased from the Ontario Government Bookstore, 880 Bay Street, Toronto, Ontario, M7A 1N8.

February, 1988

INTRODUCTION TO AUTOMOBILE INSURANCE CLASSIFICATION

Automobile insurance is the undertaking by a licensed insurance company to indemnify certain persons against loss or liability for loss connected with an incident involving a motor vehicle. Those indemnified could include the vehicle owner or driver or those injured or suffering loss as a result of an accident. Ontario law regarding automobile insurance requires that a minimum level of insurance be obtained for every motor vehicle. In addition, vehicle owners desire the protection offered by insurance and purchase types or levels of insurance beyond that mandated by law. There are over five million insured vehicles in Ontario, so a system to determine the relative risk that each vehicle represents to the overall insurance pool becomes essential.

The price charged by insurance companies for assuming the risk of indemnification is usually referred to as the automobile insurance premium. In assessing the appropriateness of a specific premium, the risks associated with that vehicle are analysed. In deciding what actual premiums should be charged, insurance companies try to predict the future - to assess the likelihood that a vehicle will be involved in an accident. The elements of this assessment, the basis on which likelihood is evaluated, are termed risk factors. Many risk factors relate to the characteristics of the vehicle itself; many others relate to the characteristics of the drivers using the vehicle or the type of activity the vehicle is used for. **A system which categorizes insurance related risk factors for groups of drivers or vehicles is a classification system; in essence, individuals are classified in response to the exposure to claims they represent for the entire insurance pool.**

Classification of risk underlies the determination of insurance premiums. The actual systems used to classify risk have differed from insurance company to insurance company. However, all insurance companies have been required to report premiums and losses in the same way based on an approved "Superintendent's Statistical Plan". Many, but certainly not all classification practices in companies have been similar to that set out under this Statistical Plan. As part of a number of automobile insurance related reforms, the Minister of Financial Institutions announced on April 23, 1987 that a uniform mandatory classification system would be introduced in Ontario. It was proposed that such a uniform system be set out by regulation and that it eliminate rating by age, sex or marital status. This regulation-making capacity has been provided for in the Ontario Automobile Insurance Board Act, 1987 (Bill 2).

The discussion that follows is an outline of the concepts underlying the draft uniform automobile classification regulation, intended as a starting point for discussion of this complex matter. It is important to note that when a final position is developed and a regulation comes into effect, it is anticipated that this regulation will evolve over time and be revised regularly. To serve the public, the classification system must change to respond to public needs and market conditions.

The draft regulation was developed with many goals in mind, goals for the overall system of automobile insurance risk classification and goals for the individual risk classification criteria.

In designing the overall classification system, it was felt that the system should:

- provide reasonable flexibility in response to the differing situations of insureds;
- increase informed consumer choice;
- be understandable to consumers, insurance brokers and insurance companies;
- not create artificial distinctions between groups of insureds;
- be consistent in applying rules across the system;
- be capable of implementation without unnecessary dislocation; and
- be based on risk factors which are independent of each other so that the relationship between risk factors and the likelihood of having an accident can be effectively measured.

To meet these goals for the classification system, it was often necessary to weigh conflicting goals to reach an appropriate balance. For example, the desire to be flexible, increase choice and avoid unnecessary dislocation may increase complexity and be in conflict with the goal of having a system which is readily understandable. Further discussion and consultation is essential to ensure the balance between goals is struck at the optimum point.

In judging what should be the individual risk factors incorporated into the overall classification system, each potential risk factor was considered and the following key questions asked:

- Is the risk factor socially acceptable? Does it incorporate, for example, elements of discrimination that are not acceptable?

- Is the risk factor clear and not ambiguous? Can people clearly determine what risk factors are applicable to them?

- Is there a plausible relationship between the risk factor and the likelihood of future claims? In other words, is the risk factor predictive of future claims or lack of future claims?

- Is the risk factor practical in that it is administratively feasible to use; is it verifiable, understandable and easily measured? As well, is the risk factor sufficiently widespread that there would be an adequate number in the group identified by the risk factor? If not, the group would lack statistical credibility.

- Are those assigned to the risk factor group homogeneous or sufficiently similar to make it likely that their experience would be similar for automobile rating purposes? If not, the premium within the group would be unfairly distributed.

- Does the risk factor create an incentive for certain desirable driving behaviours?

- Does the risk factor have the potential to be artificially manipulated in a way that distorts the overall rating system?

It was this series of questions which led to the weighing of the myriad potential factors and the choice of those factors proposed in the classification regulation. Public review of these factors is essential to ensure that those chosen best serve the public.

THE AUTOMOBILE INSURANCE CLASSIFICATION SYSTEM AND THE RATE DETERMINATION PROCESS

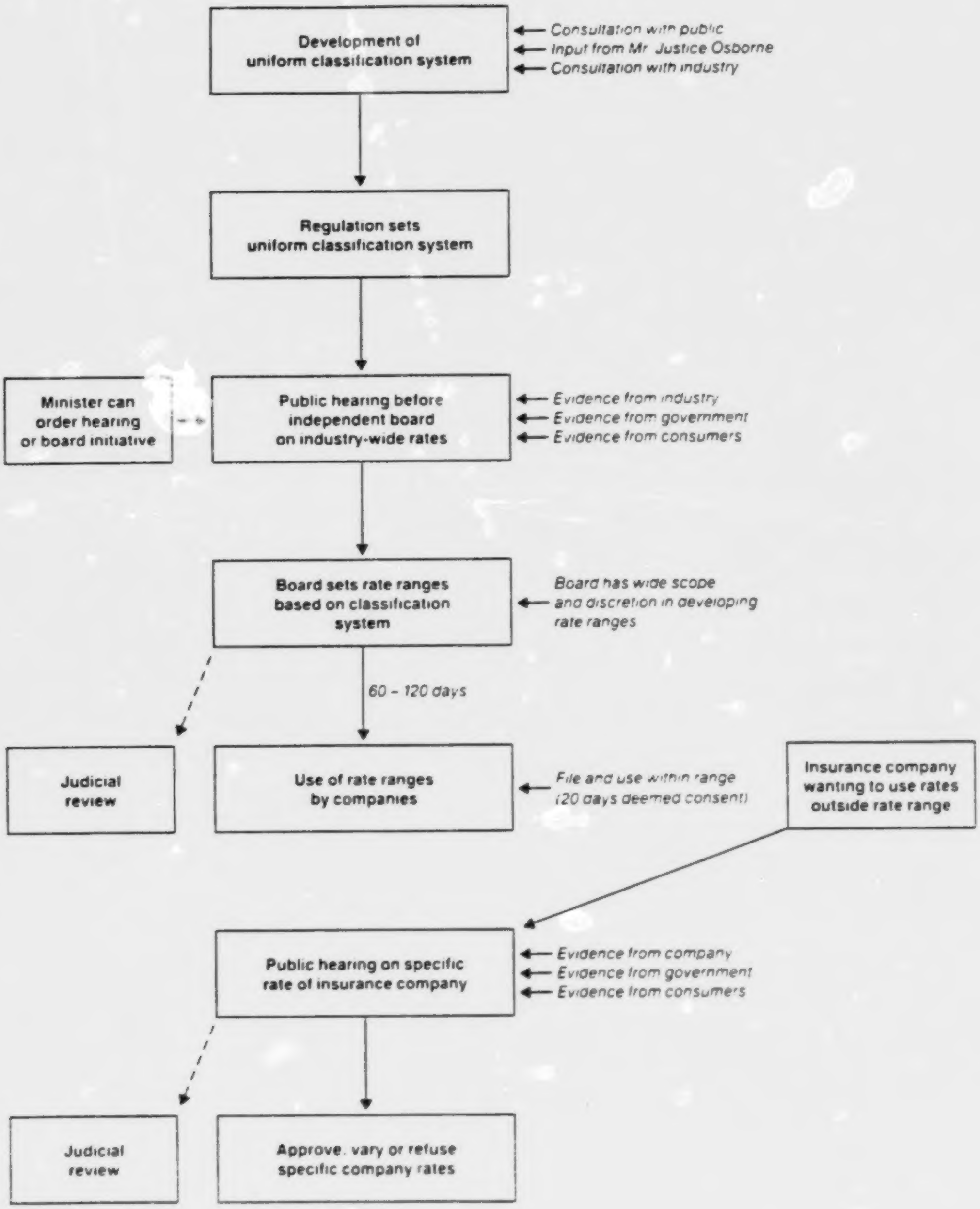
The classification system for automobile insurance is provided for by the Ontario Automobile Insurance Board Act, 1987 (Bill 2). That Bill is divided into three parts:

> Part I, which establishes the Ontario Automobile Insurance Board and provides for its powers and duties;
>
> Part II, which provides for the setting by regulation of a mandatory uniform classification system for automobile insurance risks and provides for the process of determining rates to be charged by insurance companies;
>
> Part III, which provides for the enforcement of the Act, regulations and incidental amendments to other statutes.

The flow chart on the following page outlines the process by which rates under a uniform classification system prescribed by regulation will be determined by the Ontario Automobile Insurance Board.

In brief, the Act provides that following a public hearing, the Board will set ranges of rates, using the uniform classification system as the basis for this benchmark setting exercise. Companies wishing to use rates within the range may do so by filing their specific rates, with no hearing requirement. Companies wishing to use rates outside the rate range must apply for Board approval and a public hearing will be held.

Flow Chart –
Ontario Automobile Insurance Board


Development of uniform classification system
Consultation with public
Input from Mr. Justice Osborne
Consultation with industry
Regulation sets uniform classification system
Minister can order hearing or board initiative
Public hearing before independent board on industry-wide rates
Evidence from industry
Evidence from government
Evidence from consumers
Board sets rate ranges based on classification system
Board has wide scope and discretion in developing rate ranges
60 – 120 days
Judicial review
Use of rate ranges by companies
File and use within range (20 days deemed consent)
Insurance company wanting to use rates outside rate range
Public hearing on specific rate of insurance company
Evidence from company
Evidence from government
Evidence from consumers
Judicial review
Approve, vary or refuse specific company rates

OVERVIEW OF THE PROPOSED CLASSIFICATION SYSTEM FOR AUTOMOBILE INSURANCE

Categories of Automobile Insurance Risk

The proposed classification system is divided into three general categories of automobile insurance risk, with some subcategories:

I. Personal Vehicles

- a) Private Passenger Vehicles
- b) Motorcycles
- c) Miscellaneous Personal Vehicles
  - i) Trailers and Camper Units
  - ii) Off Road Vehicles
  - iii) Antique or Historic Vehicles
  - iv) Snow Vehicles

II. Commercial Vehicles

- a) Commercial Vehicles, excluding Interurban Vehicles
- b) Interurban Vehicles

III. Public Vehicles

- a) Taxis and Limousines
- b) Buses, Ambulances and Funeral Vehicles
- c) Long Distance Buses

These categories were chosen because they follow, to a large degree, existing wide distinctions made among types of potential insurance risks. In preparing the proposed classification regulation, the Ministry retained an independent consulting actuarial firm in order to determine current classification practices in use. This study has been useful in assessing the degree of dislocation that will occur as a result of the implementation of a new uniform classification system.

In the personal automobile area, it was found that there was a wide divergence among insurance companies in the classification systems used. In the commercial area, on the other hand, there was a large degree of uniformity in classification practices, much of which has been brought forward into the current proposal. In the public automobile area, where people are carried for hire or in large numbers, there were variations in industry practice in certain areas, while other areas were characterized by a large degree of uniformity among insurance companies.

Individual Risk Factors

Within the general categories and subcategories of insurance used in the proposed classification system there are a number of individual risk factors which are employed in the design of the overall classification system. The risk factors used can generally be characterized as falling into three main groups:

- vehicle use;
- vehicle characteristics; and
- driver characteristics.

Under vehicle use, for example, there are factors relating to distance driven, territory where the vehicle is used, and type of activity the vehicle is used for.

Under vehicle characteristics, for example, there are factors relating to engine size, style or type of vehicle, age of the vehicle and price or value of the vehicle.

Under driver characteristics, for example, there are factors relating to years of driving experience, conviction and at-fault accident experience and whether the driver is an abstainer.

The risk groups are outlined in considerable detail in the chart which follows, starting on page 862.

Scope of the Classification System

The Classification System covers "automobile insurance" which is defined in the Automobile Insurance Board Act, 1987 (Bill 2). In simple terms, this definition covers all vehicles which require a permit under the Highway Traffic Act. The vast majority of vehicles are within this group. The system also covers snow vehicles under the Motorized Snow Vehicles Act.

The proposed classification system covers the "SPF #1"* owner's policy, the common contract purchased by owners for their vehicles. This policy is the standard automobile policy stipulated under the Insurance Act. The classification system would also address the "SPF #2" policy, which is called the "driver's policy". The system does not cover certain policies such as garage (SPF #4), non-owned (SPF #6) and contingent (SPF #8). These risks are less common and are often assessed on a case-by-case experience basis. This makes them inappropriate for inclusion in a classification system designed to categorize a large number of policies.

---

*SPF stands for "standard policy form"

The part of a policy which exceeds $1 million in third party liability coverage is not included in the proposed classification system and it is proposed that these large coverages generally not be subject to the Ontario Automobile Insurance Board, except for Facility Association rates. All Facility Association rates must be approved. Over 98% of private passenger motor vehicle policies have limits of $1 million or less. Further, pricing of such high limits is frequently dependent on facultative reinsurance which is in essence an individual policy for a particular risk and is individually priced. Policies in excess of $1 million are therefore not appropriate for the rate range setting approach contemplated for the classification system. There is one exception to the general exclusion of high limits. The Public Vehicles Act requires by regulation certain minimum insurance coverages for public vehicles. Depending on the seating capacity of the vehicle that minimum required may exceed $1 million. In such a case, where a limit exceeding $1 million is required by Ontario law, the classification system and Automobile Insurance Board will cover these higher limits.

Fleet rating is also excluded from the proposed classification system and is not subject to the Ontario Automobile Insurance Board. A fleet is defined as a group of five or more powered vehicles under common ownership or management, but the first five private use vehicles may be excluded for the purposes of the definition. There are several reasons for excluding fleet rating:

- fleets are usually rated by the experience of the fleet and factors such as special safety programs carried out by the fleets; to eliminate this would hurt insureds that could benefit from their personal good record or unique safety programs;

- fleets often require higher limits of coverage and facultative reinsurance; and

- many fleet owners are large corporations well able to negotiate with brokers and insurance companies on an equal footing.

It should be noted, in proposing a fleet exclusion, insurance companies may choose to either fleet rate or individually rate vehicles which qualify as a fleet. If a vehicle leaves a fleet, its experience may remain with the fleet for rating purposes.

For collision, comprehensive, specified and all perils coverages of insurance, it is difficult to classify the risk associated with very expensive vehicles, because there are very few of them. As a result, the proposed classification system will not cover the vehicle damage portion of policies for private automobiles having a price when newly purchased of more than $75,000. In the commercial and public vehicle areas, the threshold proposed is $250,000.

Standardized Provisions

In the interests of having a more consistent and understandable classification system, certain elements of the classification system are standardized. The standardized areas relate to policy deductibles, policy limits and the territories used for classifying risk.

In some coverages policyholders have the option of purchasing a policy which has certain limits for exposures. For the purpose of this proposed system, the standard limits that can be purchased are:

> $200,000 (the statutory minimum for third party liability insurance)
>
> $300,000
>
> $500,000
>
> $1 million

These limits reflect the current most common limits purchased by insureds. For public vehicles, the amounts available are those set under the Public Vehicles Act.

For some coverages, policyholders also have the option of purchasing a policy which has a deductible which must be paid by the policyholder and not by the insurance company. For the purpose of this proposed system, the standard deductibles that can be purchased are:

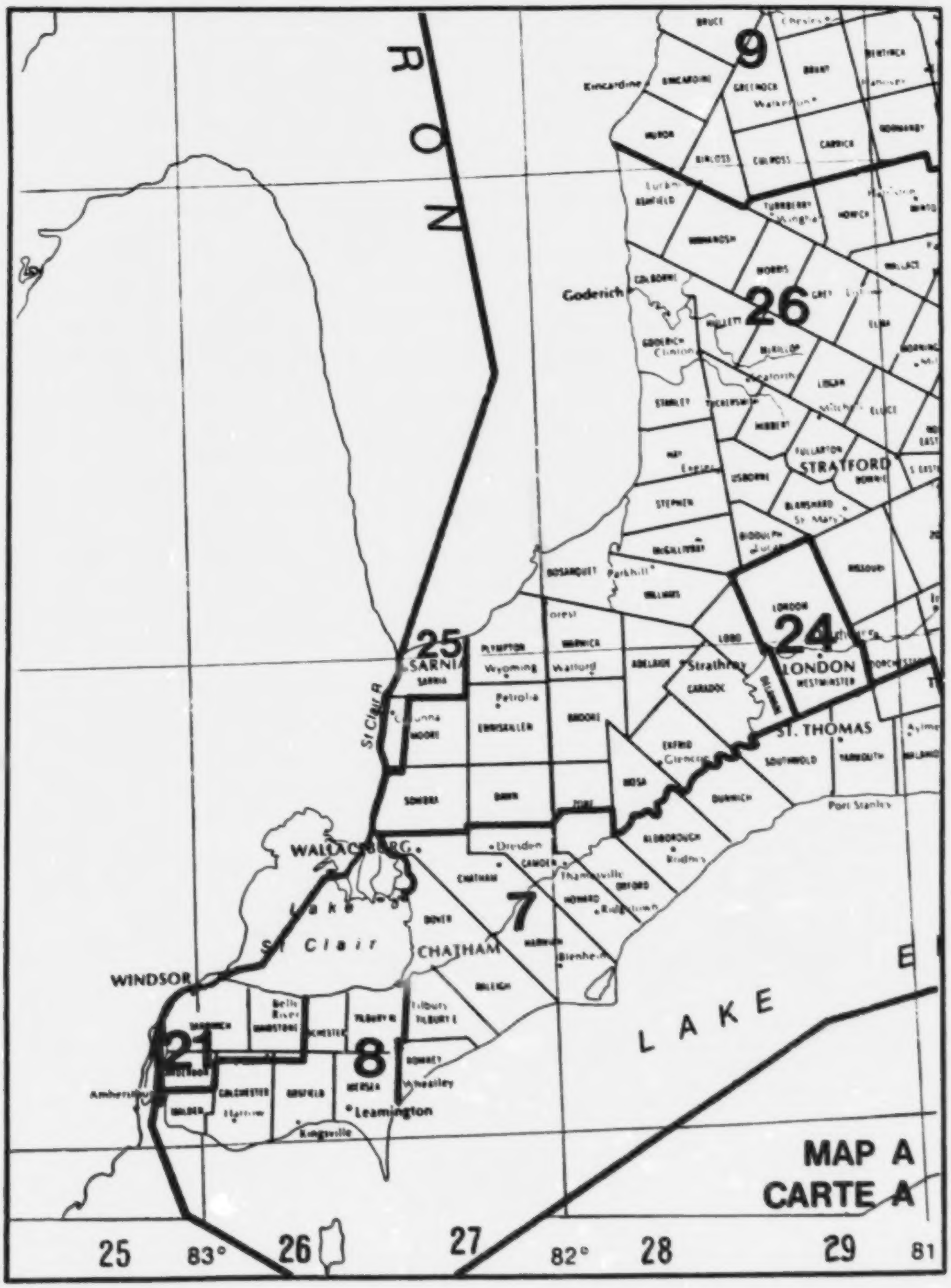
> $25
> $50
> $100
> $250
> $500
> $1000
> 5% of the value of vehicle (list price new), rounded to the nearest $250

These are the deductibles generally offered at present.

For all elements of the proposed classification system, where territory of residence or use is a factor, 28 standard territories are proposed for use:

- Metropolitan Toronto
- Markham, Richmond Hill, Vaughan - Peel Area
- Halton Area
- Hamilton-Wentworth Area
- Niagara Falls Area
- Windsor Area
- Oshawa, Aurora, Newmarket, Orangeville Area
- Brantford, Guelph, Kitchener-Waterloo-Cambridge Area
- St. Catharines-Lincoln Area
- Ottawa Area
- London Area
- Sarnia Area
- Lake Erie Area
- Essex Area
- Stratford, Woodstock, Lake Huron Area
- Grey-Bruce Area
- Lake Simcoe Area
- Parry Sound, Muskoka, Haliburton Area
- Peterborough, Lindsay, Port Hope, Cobourg, Trenton Belleville, Kingston Area
- Lake Ontario-Kawartha Lakes Area
- Southeastern Counties Area
- Lanark-Upper Ottawa Area
- Cornwall Area
- Sudbury City Area
- Northeastern Ontario, Sault Ste. Marie, Manitoulin Island Area
- North Bay Area
- Thunder Bay Area
- Northwestern Ontario

The maps which follow identify the territories relevant for classification purposes.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ASHFIELD
TURNBERRY
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HOWICK
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ELMA
GODERICH
Clinton
McKILLOP
MORNINGTON
Seaforth
LOGAN
STANLEY
TUCKERSMITH
Mitchell
ELLICE
HIBBERT
FULLARTON
STRATFORD
HAY
Exeter
USBORNE
DOWNIE
STEPHEN
BLANSHARD
St. Marys
McGILLIVRAY
BIDDULPH
Lucan
BOSANQUET
Parkhill
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WILLIAMS
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LONDON
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PLYMPTON
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CARADOC
DELAWARE
Petrolia
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St Clair R
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BROOKE
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Aylmer
EKFRID
Glencoe
SOUTHWOLD
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MALAHIDE
SOMBRA
DAWN
EUPHEMIA
MOSA
DUNWICH
Port Stanley
WALLACEBURG
Dresden
CAMDEN
ALDBOROUGH
Rodney
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Thamesville
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HOWARD
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MAP A
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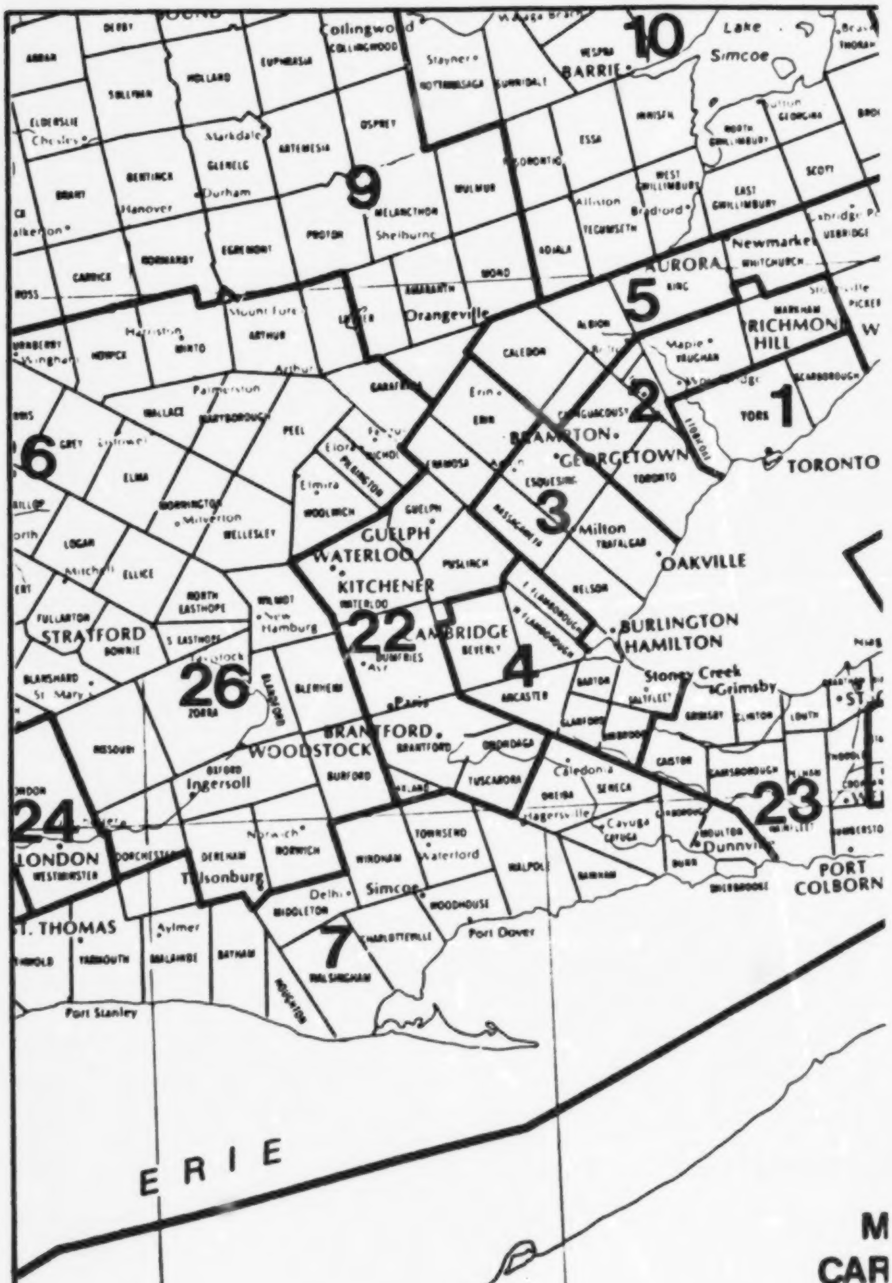
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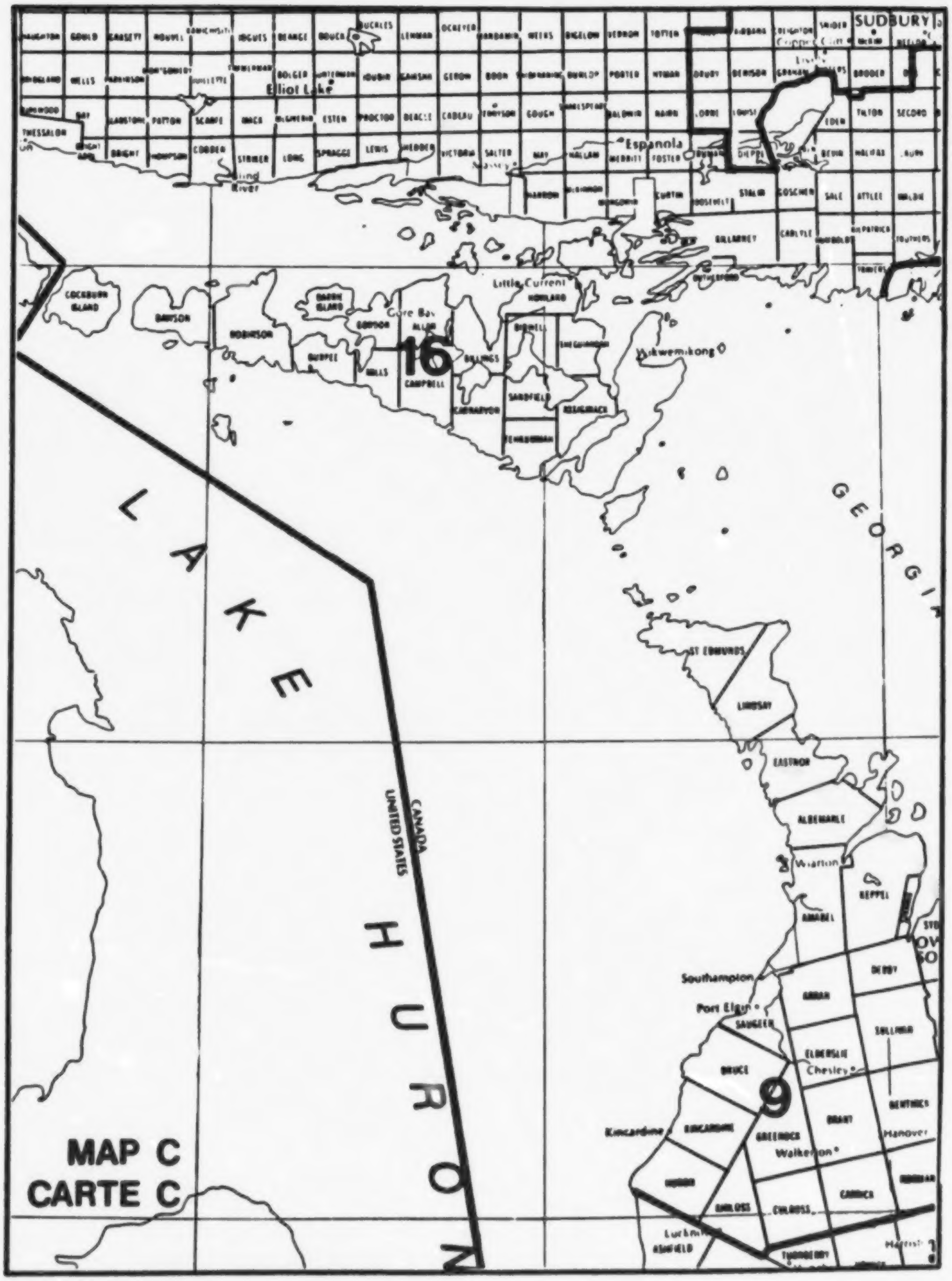
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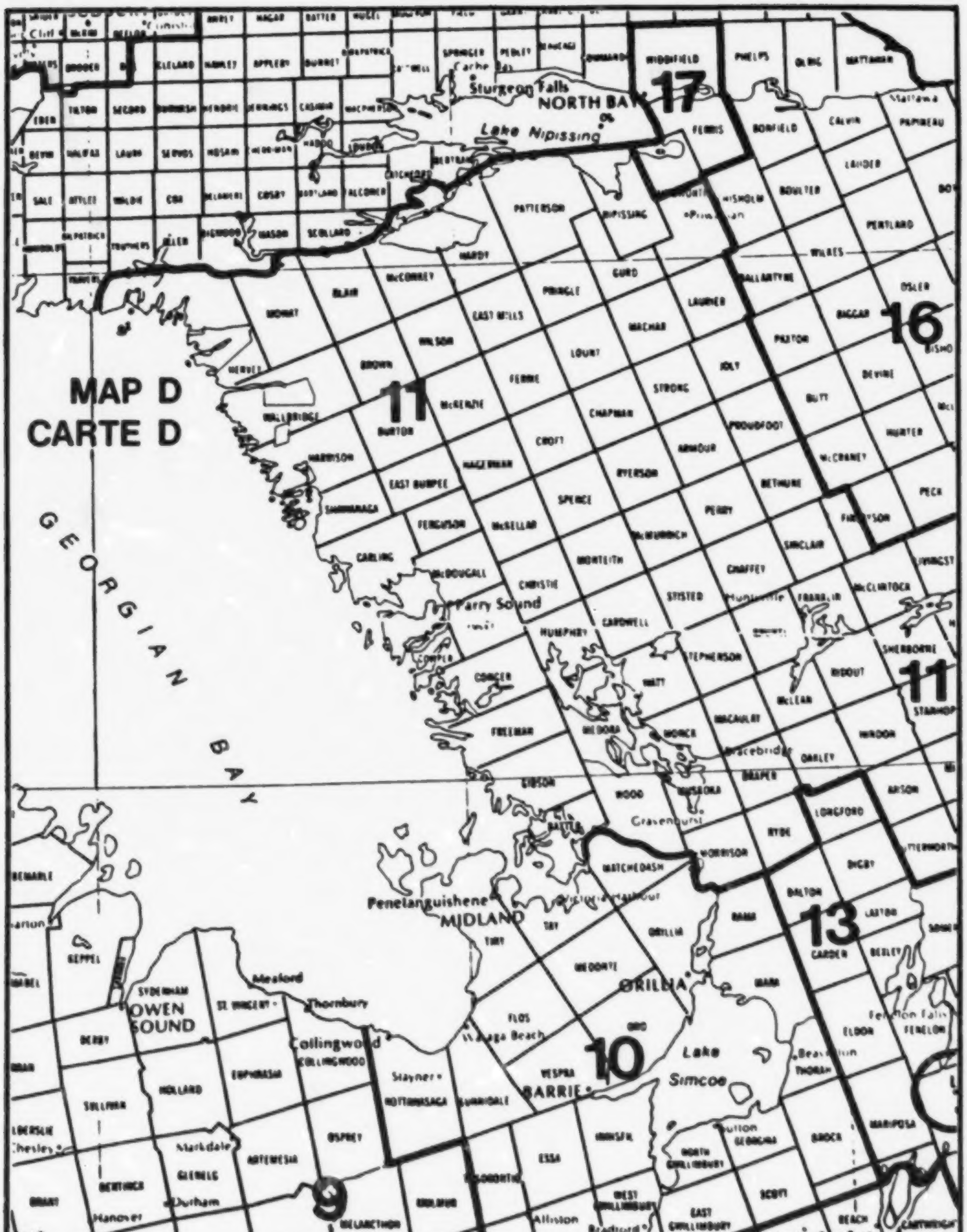
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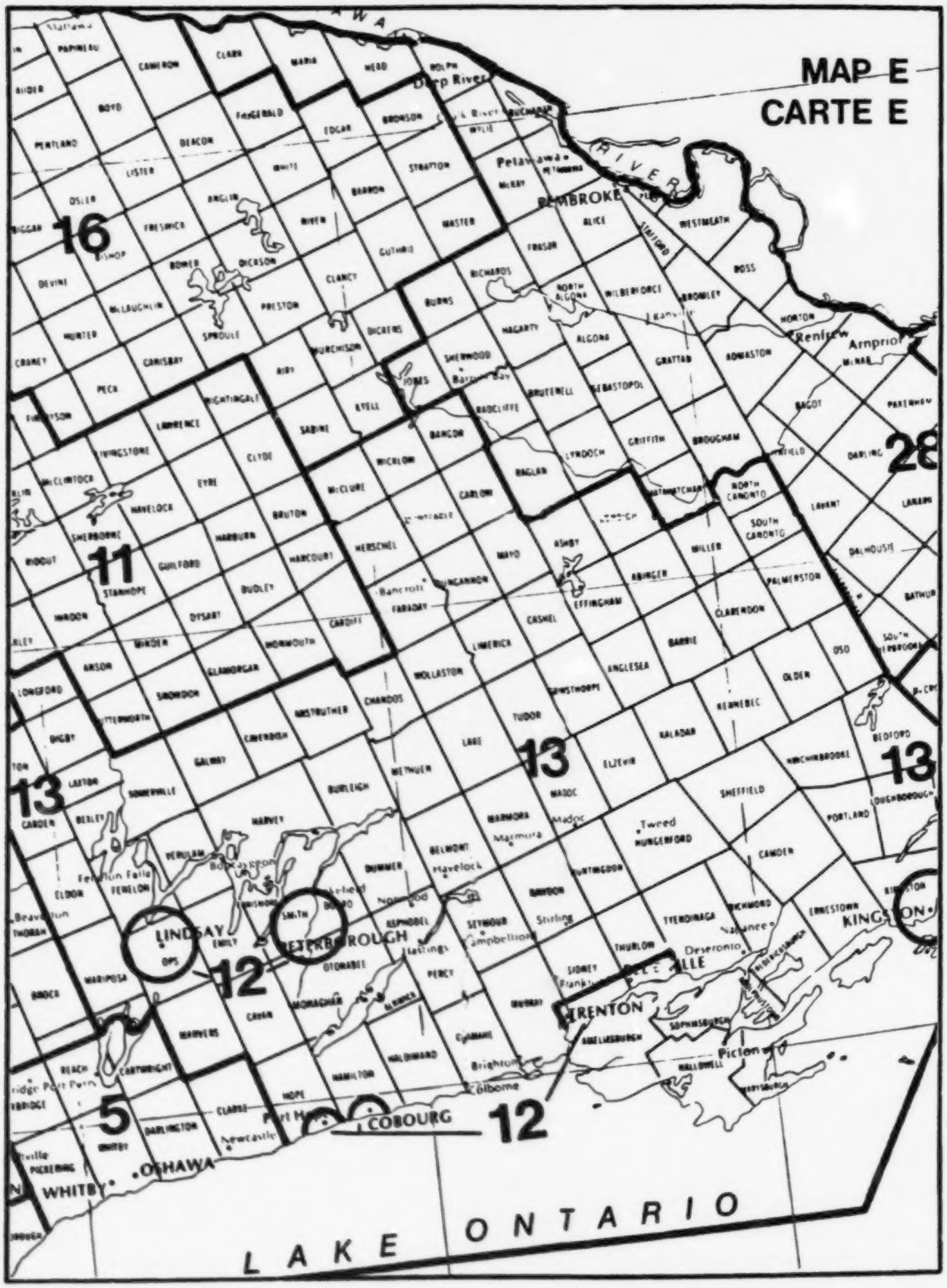
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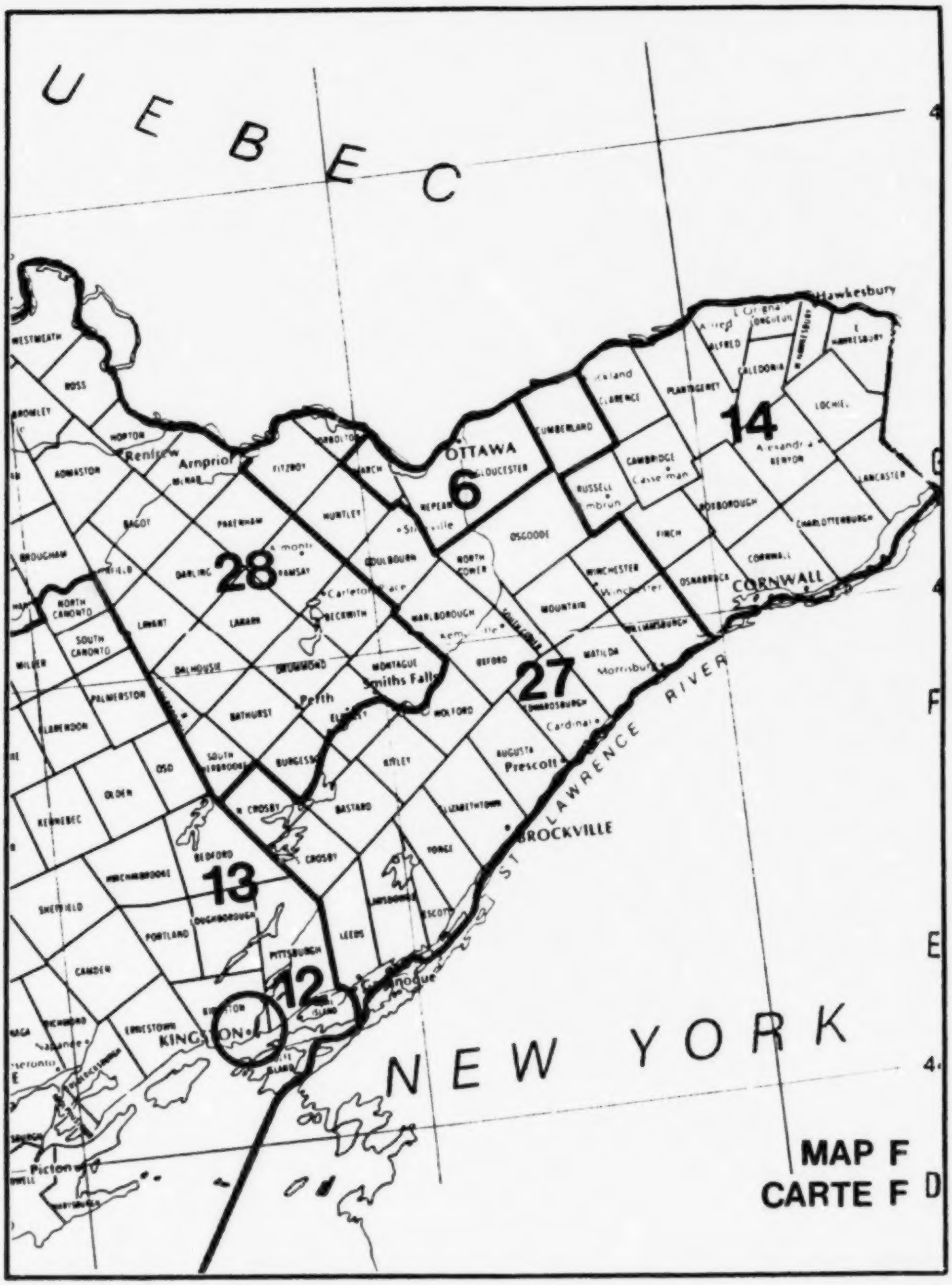
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Stittsville
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MAP F
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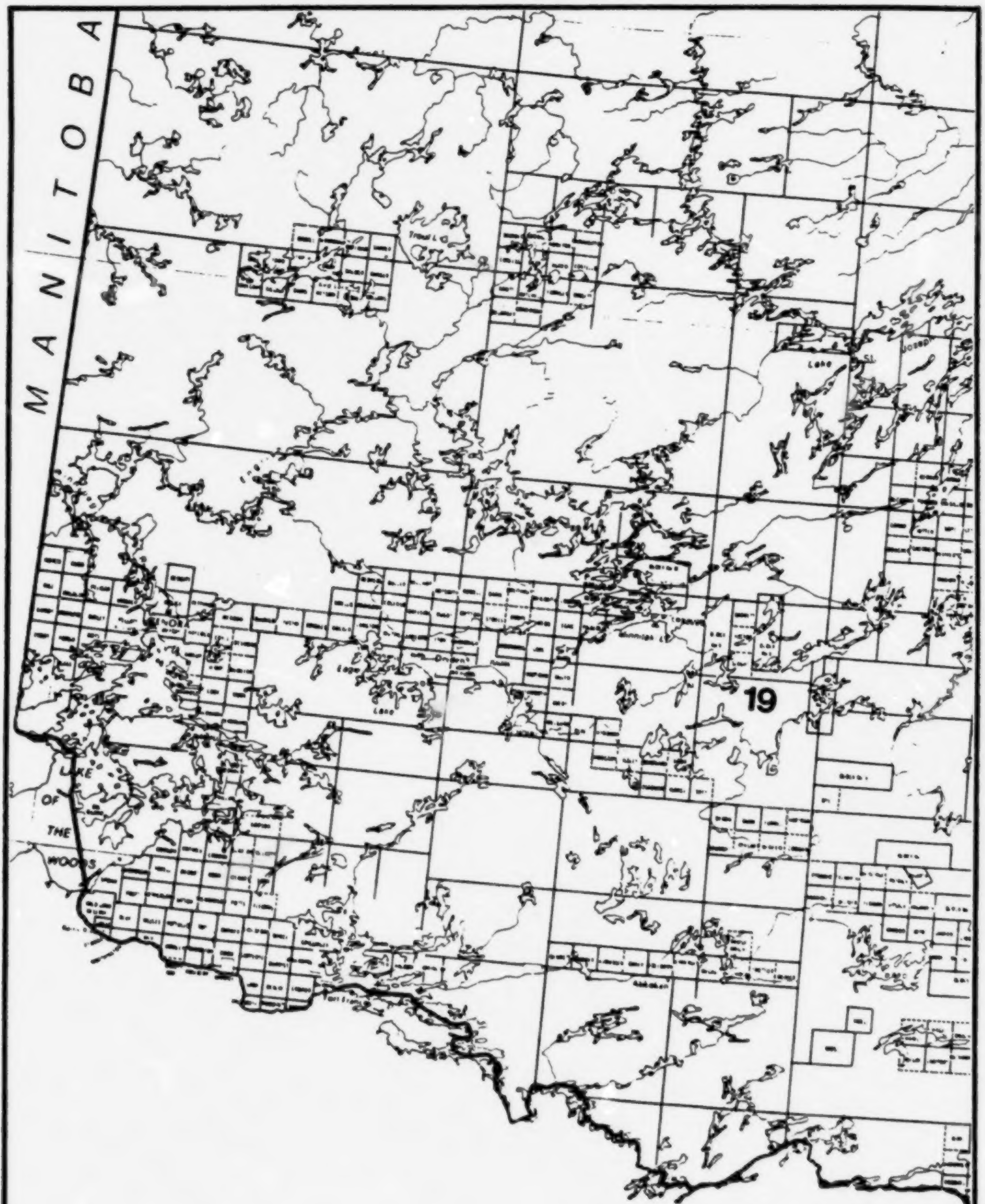
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MAP G
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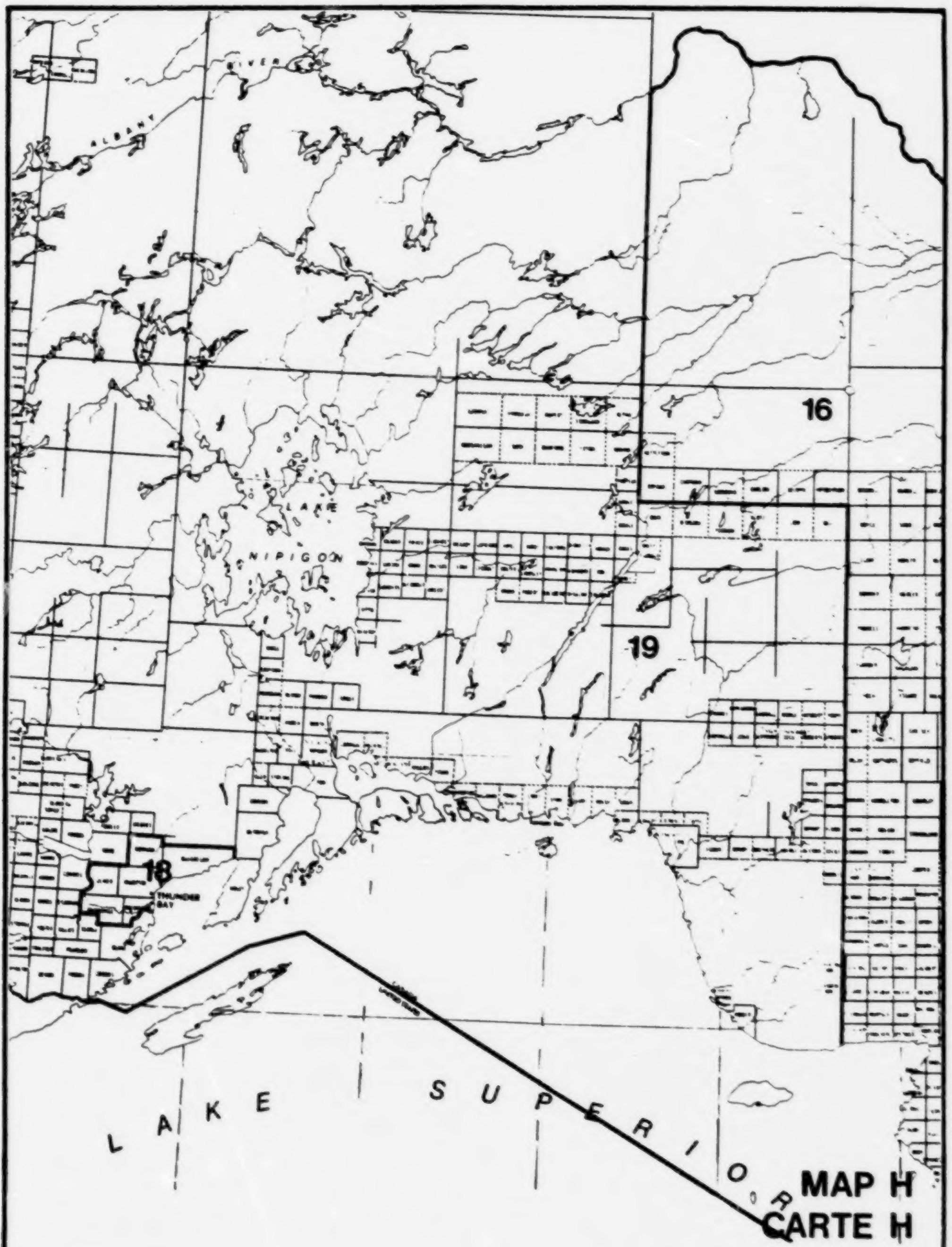
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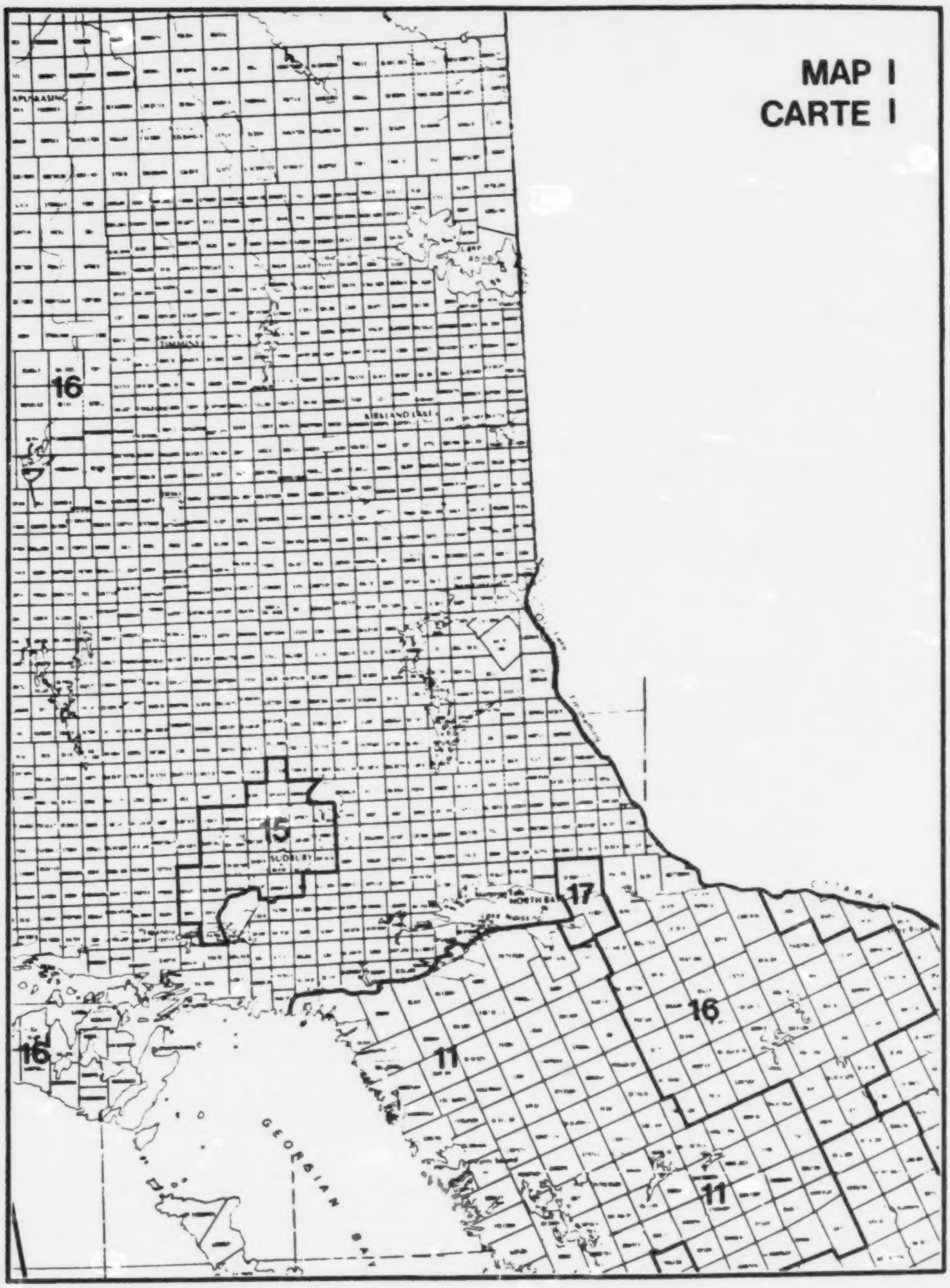
MAP H
CARTE H



MAP I
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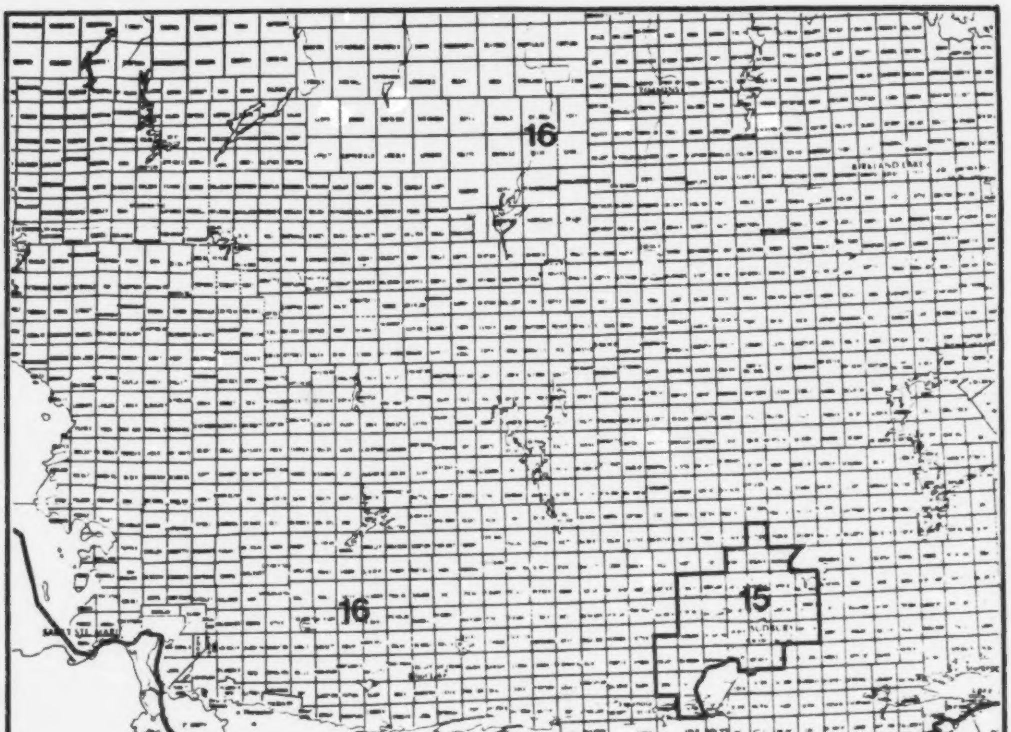
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SAULT STE. MARIE
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LAKE HURON
GEORGIAN BAY
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MAP J
CARTE J

Coverages

The classification system outlines the basic categories of insurance risks and defines the risk factors which are relevant to the determination of the hazard presented by a particular insured under certain circumstances. The risk factors are applied to certain types of insurance coverage and may vary from coverage to coverage. These coverages are:

Third Party Liability
Accident Benefits
Collision
Comprehensive
Specified Perils
All Perils
Family Protection Endorsement (SEF 44)

In the chart that follows on page 862 each general type of insurance risk category (e.g. commercial automobile) is addressed within the context of these seven insurance coverages (e.g. collision). Further, each risk element is identified within the context of its category and related insurance coverage.

Groupings of Risk Factors

As mentioned earlier, other than the standard provisions, the risk factors used in the proposed regulation relate to vehicle use, vehicle characteristics and driver characteristics. The risk factors proposed combine elements currently in widespread use and new approaches. One of the most notable new approaches is to rate insureds on the basis of years of driving experience and to expand the use of annual distance driven as a rating factor for private passenger vehicles. An owner-operator category for taxis is introduced as well as a modified system of accident and conviction recognition for rating purposes. Accident benefits coverage, which has historically been flat-rated, is rated in a manner similar to third party liability coverage because statistical evidence shows that risk varies as with third party liability coverage and these coverages must be purchased together.

In the chart which follows on page 862, the risk factors are allocated to columns entitled: use, years licensed, claims experience or "other". These are highlighted using as the reference point their application to Private Passenger Vehicles, the first category of insurance risk addressed in the chart:

(i) Use

Risk Factors included under this column include the type of activity the vehicle is used for: pleasure; farm; short commute; long commute and/or business and also sets out the annual distance driven in the use of the vehicle. The use of four distance bands reflects an expanded use of distance driven as a rating factor for private passenger vehicles.

(ii) Years Licensed

The years of driving experience is the major element of this column. Six bands are provided for principal drivers and four for secondary drivers, with one band in each of the two groups allocated to drivers with less than three years experience but who have had driver training.

(iii) Claims Experience

This column references the introduction of a modified system of accident and conviction recognition for rating purposes. The approach taken is detailed in the Regulation. In brief, at fault* accidents and convictions over a 3 year period are termed "events". New drivers come into the system on the assumption that they have no "events" (convictions or accidents). If for three years, a driver has no at fault accidents or convictions, he or she becomes a "three year event free" driver. Five years with a clean record results in achieving the best driving class for the "five year event free" driver.

---

* What is an "at fault" accident is detailed in a Schedule to the Regulation. Essentially, the driver must be at fault to some degree in an accident involving more than $500 damage. Situations in which he or she is deemed to be at fault or not to be at fault are identified in the Regulation. Examples of no fault accidents include situations where a car was legally parked and struck by a hit and run driver or situations in which a comprehensive damage claim was made, such as for a windshield struck by flying gravel. It is important to note that determinations of fault relate only to the events charging system and do not determine payment of claims or the making of settlements.

One or more events will result in a driver being moved from the "event free" classes to the classes for drivers who have had convictions or accidents. Not all convictions or accidents contribute equally to determining an "event". For example, one Criminal Code conviction such as impaired driving would count as 2 events, whereas two Highway Traffic Act convictions such as failing to yield the right of way would count as one event. As in many aspects of the proposed classification system, the ultimate determination of the appropriate weighting of these various "event" factors will greatly benefit from public consultation.

(iv) Vehicle Characteristics

Risk factors relating to vehicle characteristics apply to Collision, Comprehensive, Specified Perils and All Perils coverages for private passenger vehicles, but are not factors used in rating Third Party Liability or Accident Benefit coverages. Rate group tables are contained in the Regulation, covering vehicle model, age and type. A fallback table based on vehicle value is also used for vehicles not listed within the rate group table.

(v) Other Factors

The column indicates that non-drinking driver reductions are available for private passenger vehicles.

Procedures in Assigning Vehicles and Drivers to Risk Classes

The classification system requires the support of rules which give direction as to which rate factor is applicable in circumstances of doubt or situations where various choices are available. For example, if a vehicle is used both as a private passenger automobile and as a commercial vehicle in the owner's business, how should it be assigned to a risk group? The proposed regulation articulates the various rules applicable to the categories and classification factors. In the case of a mixed use vehicle, for example, the rule provides that a vehicle is assigned to a rating category for which the proportion of use is the highest. The chart which follows references some of the assignment rules which apply; they are more fully articulated in the regulation itself.

The chart which outlines the classification system is comprehensive in that it includes all the factors proposed for the total system. One of the considerations in implementing such a classification system is whether it should be introduced in its entirety or whether portions of it should be phased in over time.

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
I. Personal Vehicles								
a) Private Passenger Vehicles								
Third Party Liability	X	4 Uses: pleasure, farm, short commute, long commute and/or business -4 distance bands: under 6500 km, 6500-13,499 km, 13,500-24,499 km, 24,500 km +	Principal driver: <3 years experience, <3 with training, 3-6, 7-14, 15-34, 35+ Secondary driver: <3, <3 with training, 3-6 years, 7+ years	Surcharge system for "events" - accidents, 3 classes of convictions and 2 classes of claims free drivers			X	Non-drinking driver reductions permitted
Accident Benefits	X	as above	as above	as above				as above
Collision	X	as above	as above	as above	rate group tables (model, age, vehicle type) plus price if no rate group	X		as above
Comprehensive	X				as above	X		
Specified Perils	X				as above	X		

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
All Perils	X	as above	as above	as above	as above	X		
Family Protection Endorsement							X	flat rated, subject to policy limits
h) Motorcycles								
Third Party Liability	X		<2 years licensed for motorcycle, <2 years with driver training, 2+ years	Surcharge system for "events" - accidents 3 classes of convictions, 2 classes of claims free driver	Engine size <100cc, 101-400cc, 401-800cc, 801+cc		X	
Accident Benefits	X		as above	as above	as above			
Collision	X		as above	as above	value of vehicle (assumes SEF 19* endorsement)	X		
Comprehensive					as above	X		
Specified Perils					as above	X		

*SEF 19 endorsement is one in which the insured and insurer agree in advance as to the amount to be paid to the insured in the case of total destruction of the vehicle

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
All Perils	X		as above	as above	as above	X		
Family Protection Endorsement							X	flat rated, subject to policy limits
c) Miscellaneous Personal Vehicles								
i) Trailers & Camper Units								
Third Party Liability							X	Flat rated, Subject to policy limits
Accident Benefits								flat rated
Collision					price when newly purchased	X		
Comprehensive					as above	X		
Specified Perils					as above	X		
All Perils					as above	X		
Family Protection Endorsement								N/A

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
11) Off Road Vehicles								
Third Party Liability					engine size - <70cc, 71+cc + and no. of wheels - 2, 3, 4 or more		X	
Accident Benefits								Flat rated
Collision					as above and value of vehicle (assumes SEF 19 endorsement)	X		
Comprehensive					as above	X		
Specified Perils					as above	X		
All Perils					as above	X		
Family Protection Endorsement							X	Flat rated, subject to policy limits

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
iii) Antique or Historic Vehicles								
Third Party Liability							X	Flat rated, subject to policy limit
Accident Benefits								Flat rated
Collision					value of vehicle (assumes SEF 19 endorsement)	X		
Comprehensive					as above	X		
Specified Perils					as above	X		as above
All Perils					as above	X		as above
Family Protection Endorsement							X	Flat rated, subject to policy limits

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
iv) Snow Vehicles								
Third Party Liability							X	Flat rated, subject to policy limit
Accident Benefits								Flat rated
Collision					price when newly purchased	X		
Comprehensive					as above	X		
Specified Perils					as above	X		as above
All Perils					as above	X		as above
Family Protection Endorsement							X	Flat rated, subject to policy limits

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
II. Commercial Vehicles								
a) Commercial Vehicles, Excluding Interurban Vehicles								
Third Party Liability	X	Commercial use rate groups by weight	where driver identified, as in private passenger vehicle otherwise not a factor	where driver identified, as in private passenger vehicles, otherwise claims experience of vehicle (number of claims in last 3 years)			X	U.S. exposures Trailer exposure
Accident Benefits	X	as above	as above	as above				
Collision	as above	as above	as above	as above	price when newly purchased and age and rate groups by weight	X		
Comprehensive	as above	as above			as above	X		

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
Specified Perils	as above	as above			as above	X		
All Perils	as above	as above	as above	as above	as above	X		
Family Protection Endorsement							X	Flat rated, subject to limits

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
b) Interurban Vehicles								
Third Party Liability	Distance bands: (from garage) 161-320 km 321-480 km 481-800 km 801-960 km 961+ km	Commercial use rate groups by weight	For identified driver only	If driver identified, as in private passenger vehicle otherwise claims against vehicle for last 3 years and rate groups by weight			X	U.S. exposure by distance bands Trailer exposure
Accident Benefits	as above	as above	as above	as above				as above
Collision	as above	as above	as above	as above	Price of vehicle when newly purchased and age and vehicle rate groups by weight	X		
Comprehensive	as above	as above	as above	as above	as above	X		as above

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
Specified Perils	as above	as above	as above	as above	as above	X		as above
All Perils	as above	as above	as above	as above	as above	X		as above
Family Protection Endorsement							X	flat rated, subject to limits

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
III. Public Vehicles								
a) Taxis and Limousines								
Third Party	X	4 categories: owner/operator taxi, airport limousines, other taxis, other limousines	For owner-operator taxi category only, same as private passenger vehicle	For owner-operator category only, same as private passenger vehicles For other categories, number of claims in last 3 years			X	
Accident Benefits	X	as above	as above	as above				
Collision	X	as above	as above	as above	rate groups as in private passenger automobile	X		
Comprehensive	X				as above	X		
Specified Perils	X				as above	X		
All Perils	X	as above	as above	as above	as above	X		
Family Protection Endorsement							X	Flat rated, subject to policy limits

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
b) Buses, Ambulances, Funeral Vehicles								
Third Party Liability	X	6 types		claims experience of vehicle (# claims in last 3 years)			subject to Public Vehicles Act	number of seats
Accident Benefits	X	6 types		as above				as above
Collision	X	6 types		as above	price when newly purchased, age of vehicle	X		
Comprehensive	X	6 types			as above	X		
Specified Perils	X	6 types			as above	X		
All Perils	X	6 types		as above	as above	X		
Family Protection Endorsement							as above	Flat rated, subject to policy limits

Note: the 6 types of uses are:

public bus - less 160 km between terminal points
school bus
school and other activites bus
hotel or country club bus
ambulance
funeral vehicle

OUTLINE OF ALL AUTOMOBILE CLASSIFICATION
FACTORS BY CATEGORY OF INSURANCE RISK AND TYPE OF INSURANCE COVERAGE

Category of Insurance Risk by Coverage	Territories	Use	Years Licensed	Claims Experience	Vehicle Characteristics	Deductible	Policy Limits	Other Factors, (Specifically Named)
c) Interurban Buses								
Third Party Liability	160 km + between terminal points,	Public Bus		Number of claims in last 3 years			subject to Public Vehicles Act	Number of seats U.S. exposure
Accident Benefits	as above	as above		as above				as above
Collision	as above	as above		as above	Price when newly purchased plus age	X		as above
Comprehensive	as above	as above		as above	as above	X		as above
Specified Perils	as above	as above		as above	as above	X		as above
All Perils	as above	as above		as above	as above	X		as above
Family Protection Endorsement							as above	

Structure of the Draft Regulation

The draft regulation setting out the classification system commences with interpretation and application sections. Following these are provisions which identify the use and application of the schedules to the regulation. Procedures for the assignment of vehicles and insureds to various classes of risk exposure are then detailed in the regulation. The regulation is completed by its schedules. The key schedule sets out the framework of the classification system by outlining the categories of automobile insurance and the classes of risk exposure in relation to the coverages of insurance. The schedules following expand on various aspects of this framework.

The regulation-making authority for the proposed regulation comes from the Ontario Automobile Insurance Board Act, 1987 (Bill 2), sections 19 and 29. These sections read:

19. The Lieutenant Governor in Council may prescribe the classes of risk exposures that may be considered in determining the premiums for coverages for different categories of automobile insurance and the procedures to be followed in assigning insureds and vehicles to any such class of risk exposure.

29(1) The Lieutenant Governor in Council may make regulations,

- a) prescribing classes of risk exposure and categories of automobile insurance for the purposes of this Act;
- b) prescribing procedures to be followed in assigning insureds and vehicles to a class of risk exposure; and
- f) exempting insurers from the requirements of Part II in respect of such categories of automobile insurance, such coverages or such classes of risk exposure as may be set out in the regulations.

The regulation outlining the proposed uniform classification system for automobile insurance follows.

DRAFT CLASSIFICATION SYSTEM REGULATION

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DRAFT ONLY

REGULATION MADE UNDER THE ONTARIO AUTOMOBILE INSURANCE BOARD ACT, 1987

CLASSIFICATION SYSTEM

Interpretation

1. In this Regulation,

"accident and conviction history class" means the applicable class of risk exposure selected from among the classes described in Schedule 3;

"airport limousine" means a limousine that is restricted to transporting passengers to an airport by prearrangement and from an airport;

"bus" means a motor vehicle designed to carry ten or more passengers and used for the transportation of persons, and a motor vehicle designed to carry less than ten passengers that is licensed under the Public Vehicles Act;

"commercial vehicle" means a vehicle that is used in the business of an insured primarily to transport materials, goods, tools or equipment;

"commercial vehicle rating group" means the applicable class of risk exposure selected from among the classes described in Schedule 14;

"commuting" in relation to the use of a personal vehicle means transporting persons regularly from their residence to and from their place of employment or school, or to and from an intermediate place, and includes the use of the vehicle as a carpool vehicle whether or not passengers contribute money toward the cost of commuting;

"dangerous goods" means dangerous goods as defined in the Transportation of Dangerous Goods Act (Canada);

"depreciated vehicle value rating group" means the applicable class of risk exposure selected from among the classes described in Schedule 16;

"driver training" means the completion of a course of driver education, as evidenced by a certificate, that is taught by a person who is licensed as a driving instructor under the Highway Traffic Act;

"funeral vehicle" includes a hearse and a limousine that is used in the conduct of funerals;

"heavy" with respect to a vehicle means a vehicle that weighs more than 4.5 tonnes;

"historic vehicle" means a vehicle that is licensed as an historic vehicle under the Highway Traffic Act;

"interurban bus" means a bus that travels between terminal points that are more than 160 kilometres apart;

"interurban vehicle" means a heavy commercial vehicle with a radius of travel that is greater than 160 kilometres;

"limousine" means a public vehicle equipped to carry a maximum of six passengers that is restricted to transporting passengers by prearrangement;

"light" with respect to a vehicle means a vehicle that weighs 4.5 tonnes or less;

"motorcycle" means a two- or three-wheeled motorized vehicle that is licensed for highway use;

"motorcycle driver training" means driver training in the use of a motorcycle;

"non-drinker" in relation to a driver means a person who has agreed not to consume any alcoholic beverage, except minimal amounts consumed in connection with a religious ceremony, during the term of a contract of automobile insurance;

"off-road vehicle" means an off-road vehicle as defined in the Off-Road Vehicles Act, 1983;

"policy deductible class" means the applicable class of risk exposure selected from among the classes listed in Schedule 5;

"policy limit class" in relation to a type of coverage means the applicable class or classes of risk exposure selected from among the classes described in Schedule 4;

"price when new" in relation to a vehicle means the amount paid to the vehicle's dealer or manufacturer by the first purchaser of the vehicle;

"public vehicle" means a vehicle that is used to carry passengers for compensation and includes ambulances and funeral vehicles;

"retail delivery" in relation to the use of commercial vehicles means the delivery of goods sold by retailers to consumers in small quantities or in broken lots or parcels;

"snow vehicle" means a motorized snow vehicle as defined in the Motorized Snow Vehicles Act;

"taxi" means a public vehicle equipped to carry a maximum of six passengers;

"territory class" means the applicable class of risk exposure selected from among the classes listed in Schedule 2;

"trailer" means a trailer as defined in the Highway Traffic Act;

"trailer exposure" in relation to a commercial vehicle means that the commercial vehicle is operated with a trailer attached to it;

"vehicle claims record class" means the applicable class of risk exposure selected from among the classes described in Schedule 13;

"vehicle use rating group" means the applicable class of risk exposure selected from among the classes described in Schedule 12;

"vehicle value rating group" means the applicable class of risk exposure selected from among the classes described in Schedule 6;

"wholesale delivery" in relation to the use of commercial vehicles means the delivery of goods to retail dealers or jobbers for the purpose of retail sale;

"years licensed" in relation to a driver means the number of whole years that the driver has held a licence issued by a governmental authority to operate a motor vehicle.

Types of Contracts and Endorsements

2.-(1) Contracts of automobile insurance that are issued in Standard Policy Form 1 or 2 under the Insurance Act, and the endorsements thereto approved by the Superintendent of

Insurance under subsection 203(1) of the Insurance Act that are set out in subsection (2), are prescribed as the types of contract and types of endorsement to which Part II of the Act applies.

(2) The endorsements referred to in subsection (1) are those written on Standard Endorsement Forms numbered 3, 6a, 6d, 8, 13c, 16, 17, 19, 19a, 20, 22, 22b, 26, 27, 29, 35, 40 and 43r.

(3) Despite subsection (1), Part II of the Act does not apply to any contract of automobile insurance that insures a fleet of commercial vehicles.

(4) In subsection (3), "fleet" means a group of at least five vehicles, each with its own source of power, that are under common ownership or management.

(5) In determining whether a group of vehicles is a fleet, five personal vehicles that would otherwise fall within the group shall be excluded from the group.

Categories of Automobile Insurance

3. The categories of automobile insurance set out in Column 1 of Schedule 1 are prescribed as the categories of automobile insurance for the purposes of the Act.

Classes of Risk Exposure

4. The classes of risk exposure set out in Column 3 of Schedule 1 are prescribed as the classes of risk exposure for

the coverage set out opposite thereto in Column 2 for the category of automobile insurance set out opposite thereto in Column 1.

Principles of Classification

5.-(1) A vehicle that is not a commercial vehicle or a public vehicle shall be assigned to the personal vehicle category of automobile insurance.

(2) A vehicle that is used as a commercial or public vehicle and as a personal vehicle shall be assigned to the category of automobile insurance for which the proportion of the vehicle's use is the greater.

6.-(1) The person who operates a vehicle most frequently shall be designated as the principal driver of the vehicle.

(2) Where more than one person operates a vehicle, a person who is not the principal driver shall be designated as the secondary driver of the vehicle.

(3) Where, in addition to the principal driver, more than one person operates a vehicle, the person with the fewest years licensed shall be designated as the secondary driver of the vehicle.

7. For the purpose of determining the number of years licensed of a driver, the number shall not include any year licensed when the driver would have been ineligible because of the driver's age to obtain a licence in Ontario.

8. A commercial or public vehicle that is operated in Canada and in the United States shall be assigned to a U.S. exposure class of risk exposure under Schedule 1 or 18 where the proportion of the vehicle's use in the United States exceeds the proportion of the vehicle's use in Canada.

9. The radius of travel of a vehicle is the distance travelled by the vehicle from its point of origin to reach the farthest destination to which it is anticipated that the vehicle will travel during the term of a contract of automobile insurance.

10. Where an insured does not know the price when new of a vehicle, the insurer and the insured shall at the time of entering into the contract of automobile insurance agree upon an amount to be used to substitute for the price when new of the vehicle to determine the price when new class of risk exposure, if any.

Personal Vehicles

11. No personal vehicle shall be assigned to the farm use class of risk exposure unless,

(a) the vehicle is owned by a person who resides on a farm and engages in farming; and

(b) the vehicle is not used for commuting or a business not related to farming.

12. A personal vehicle shall be assigned to the pleasure use class of risk exposure if it does not fall within any other class of use.

13.-(1) Despite section 6, no person shall be designated as the secondary driver of more than one personal vehicle in a household.

(2) Where, in a household, there are more personal vehicles than there are secondary drivers, the insurer and the insured shall agree at the time of entering into the contract of automobile insurance upon the vehicle to which each secondary driver is assigned for insurance purposes.

Commercial Vehicles

14. A commercial vehicle shall be classified as being operated by identified drivers if,

(a) it is operated by a maximum of three drivers;

(b) the principal driver owns the vehicle; and

(c) the principal driver and the additional drivers are named in the application for the contract of automobile insurance.

Public Vehicles

15. A bus that is used as an interurban bus and used for other purposes shall be assigned to the interurban bus subcategory of automobile insurance.

16.-(1) A taxi shall be classified as an owner-operated taxi if,

(a) the taxi is operated by its owner or long-term lessee;

(b) the taxi is operated by a maximum of two additional drivers; and

(c) the owner or lessee, as the case may be, and the additional drivers are named in the application for the contract of automobile insurance.

(2) In this section, "long-term lessee" means a person who, by an agreement in writing, is the lessee of a taxi for a period of at least one year from the date of the contract of automobile insurance.

APPENDIX XVII

Summary: I.B.C. Ontario Bodily Injury Claims Survey

February 1987

The survey requested individual returns for all claims in excess of $90,000 and a sampling of claims between $25,000 and $90,000 on Ontario bodily injury Claims settled during 1985 and 1986 with accident dates of 1981 to 1983.

These two layers were combined using a 40:60 weight scheme and all percentage costs referred to in the following section will be the weighted figures. The weights are established based on the 1983 Fiscal Policy Year Bodily Injury Size-of-Loss distribution (Ontario Private Passenger - excluding farmers) which shows that claims beyond $25,000 made up approximately 65% of total Bodily Injury losses (with an approximate 60:40 split for the two layers).

There were in total approximately 1,300 claims returned to the Bureau and 1,144 were accepted after validation.

The survey results can be summarized as follows:

1. Taken together, prejudgment interest and Family Law Act claims constitute 19% of the total claims cost for claims greater than $25,000.

2. Non-pecuniary losses make up another 29% of the total claims costs for claims beyond $25,000.

3. Future care and future economic losses (including gross up and fund management) make up a further 21% of total claim costs for claims over $25,000, and become a progressively significant portion of the larger claims.

4. Because of the design of the claims survey form, it is unclear from the survey if gross up was a significant factor in the claims. It should be noted that claims subjected to gross-up may be ultimately settled by Structured Settlement.

5. Third party legal costs represent another 9% of total claims costs for claims greater than $25,000.

6. First party legal and investigation costs make up another 7% of the claims beyond $25,000.

While the results of this survey do not totally explain the escalating bodily injury costs in Ontario (up 90% in the last five years), they do reveal that Family Law Act claims and prejudgment interest have had a significant impact on such costs and that non-pecuniary losses are also a very significant part of total bodily injury costs. In addition, loss costs per vehicle have further been affected by the increasing frequency of bodily injury claims.

FISCAL POLICY YEAR	ONTARIO BI LOSS COST PER VEHICLE
1981	112.20
1982	119.08
1983	142.73
1984	168.78
1985	199.08
1986	213.63

I.B.C ONTARIO BODILY INJURY CLAIMS SURVEY
1981 - 1983 ACCIDENT YEAR CLAIMS CLOSED IN 1985-1986
PERCENTAGE OF TOTAL LOSS AND LOSS ADJUSTMENT EXPENSE

CATEGORY	CLAIMS $25,000 TO $90,000	OVER $90,000	WEIGHTED AVERAGE
Past Income	16.0	11.9	13.5
Past Medical & Funeral & Other	1.4	1.0	1.2
Future Economic (including Gross up & Fund Management)	5.6	27.1	18.5
Future Care	0.2	4.1	2.5
Prejudgment Interest	13.0	9.0	10.6
TOTAL ECONOMIC	36.2	53.1	46.3
Non-Pecuniary Damages	38.7	22.9	29.3
Family Law Reform Act	5.3	10.5	8.4
Party and Party Costs	10.2	8.1	8.9
Solicitor/Client Investigation	9.6	5.4	7.1
GRAND TOTAL	100.0	100.0	100.0
WEIGHTS FOR AVERAGE	40.0	60.0	100.0

APPENDIX XVIII

1986 LEADERS IN DIRECT AUTOMOBILE INSURANCE PREMIUMS WRITTEN

-ONTARIO-

RANK	COMPANY	$ (millions)
1	Co-Operators General	279,167
2	State Farm Group	210,323
3	Royal Insurance Canada	177,976
4	Economical Group	177,192
5	Pilot Insurance	149,816
6	Zurich Insurance	123,992
7	Allstate of Canada	122,171
8	General Accident	119,294
9	Dominion of Canada Gr.	118,183
10	Commercial Union	89,679
11	Safeco Insurance Gr.	85,200
12	Phoenix Continental	73,694
13	Travelers Canada	73,493
14	Wellington Insurance	70,534
15	Guardian of Canada	60,644
16	Wawanesa Mutual	60,330
17	Liberty Mutual Group	59,891
18	Gore Mutual Insurance	51,148
19	Home Insurance	51,018
20	Canadian General Gr.	45,528
21	Simcoe Erie Group	40,079
22	Halifax Insurance	38,442
23	Guarantee of N. America	37,436
24	Scottish & York	35,709
25	Indep. Ins. Mgrs. Group	32,023
26	CIGNA Ins. Co. of Canada	27,246
27	Marxel Insurance	26,837
28	Prudential Assurance	25,907
29	USF & G. Insurance Group	25,754
30	Hartford Group	24,998
31	Transit Insurance	24,277
32	Canadian Surety Ins.	23,585
33	Aetna Cas. Co. of Can.	23,100
34	Laurentian General	22,891
35	Ontario Mutual Assoc.	22,434
36	Advocate General	20,223
37	Constitution Insurance	19,838
38	Prud. of America Gen.	17,803
39	Metropolitan Insurance	17,776
40	CAA Insurance Co. (Ontario)	17,008
41	Anglo-Gibraltar Gr.	16,985
42	Sun Alliance Ins.	16,826
43	PAFCO Financial Holdings	16,628

44	Unifund Assurance	15,074
45	Lloyd's Non-Marine	14,151
46	Employers of Wausau	13,639
47	Eaton Insurance	13,338
48	Lumbermens Mutual Cas.	13,119
49	Federation Ins. Group	13,091
50	Tevco Insurance	13,063
51	Federated Mutual	12,085
52	Abstainers Insurance	10,426
	Total of 52 insurance companies with direct written premium volumes greater than $10 million	2,891,064
	Balance of leading insurers	71,310
	Total of 70 leading insurers	2,962,374*
	Estimated premium volume for the balance of the insurers in Ontario	37,626
	Estimated Grand Total	3,000,000

* Source: Canadian Insurance Agent and Broker 1987 Annual Review of Statistics.